

MAVERICK BEHAVIOR VS. RULE-BASED BEHAVIOR: THE MODELING OF RULE-MAKING

Zoltan Baracscai
Szechenyi Istvan University, Hungary
baracscai.zoltan@sze.hu

Abstract:

The mavericks of an organization are always dancing on the precipice of being fired, and yet they are very rarely fired. Maverick behavior employees do not have a traditional career path like their rule-based behavior colleagues. Rule-based behavior employees are part of a well-structured process, while their maverick behavior counterparts change the existing processes or create new ones. Due to the differences in behavior and career trajectory, they often get into conflict both with each other and with the management. This article aims to demonstrate how Artificial Intelligence can help in the modeling of maverick behavior vs. rule-based behavior. The inductive reasoning of Doctus KBS based on AI uses the principle of Ockham's Razor to find consistent and relevant behavior patterns. This allows management to see the sources of conflict more transparently.

Keywords: Rule-maker, Misbehaving, Artificial intelligence, Decision support systems, Organizational behavior

1. THE QUEST FOR THE RIGHT QUESTION

There are many rules that make our behavior easier. No smoking, no dogs allowed, no left turns. Cannot use feet in handball, cannot use hands in football. The movie titled “The Official George Best Story – Genius, Maverick, Legend” teaches us that even he could not use his hands on the pitch. It would be too simple to say that in the 60s, Best was allowed to have long hair, while the others were not. Re-setting the atmosphere is always about re-thinking human relationships, but that should never be interpreted as allowing for a bit of deviance. So let us look for the question elsewhere. We must also pay attention to mavericks whose strength is thinking differently (Gardiner & Jackson, 2012). In many ways, mavericks need anti-leaders, but this is not completely true, because Best had the same coach as Charlton at Manchester United. “Our finding of maverickism as consisting of both functional and dysfunctional aspects highlights the need for managers to take a balanced approach in providing a work environment that allows mavericks to be individualist while also recognizing that mavericks might need to be closely monitored. Although we think that maverickism may not be equally appropriate or beneficial across all work settings, we also think that the merits of the maverick should not be understated” (Gardiner & Jackson, 2015:731).

All examinations of the subject have focused on the maverick's deviance from rule-based behavior, and so it might sting a little to read the following lines: Let us ask a question, which does not contain any notions of creativity and innovation, nor will its answer (Beadle, 2017). What I would like to change about this conservative approach is that we stop looking for deviance and the benevolent lenience towards a deviant. What if we took a different approach, and did not assume that there are normal rule-followers and deviant mavericks? They exist, but they do not bother each other.

A free observer can see the leader as someone inviting them on an intellectual adventure, as a person who sees the place of Yuccies (Young Urban Creatives) in the glocal village (Florida, Mellander & King, 2015). Yuccies are the mavericks of the age of rule-based behavior and they can understand the world of Extremistan (Taleb, 2007). “Our empirical findings have two important implications for practicing managers and HR professionals. First, our research demonstrates that learning and personality go hand in hand, such that our results indicate that while personality is a key predictor of maverickism, considering an individual's learning processes is also important” (Gardiner & Jackson, 2015:734). In every day and age, a Requiem was played for the free thinker, but the world of Extremistan never went extinct. For Yuccies, who stay outside the gates, reachability is more important than writing emails, and so the spaces and coffee houses of big cities have become more significant. They too, just like other tribes in the village, speak a secret language, a slang that tells them if another is one of them or not (Velencei, 2016). Everything is fine, we are okay, we are simply different from others, we usually say. If we were the same, then one of us would be superfluous. It is dangerous if the rules are interpreted in the same way in every village. Laws created by humans are in fact invitations to behave a certain way, and we can decide if we want to behave in that way. The laws of Nature are in fact simply descriptions of how things behave, and we cannot choose if we want it to be that way. The understanding of the reality of human behavior cannot come about in the same way as the understanding of Nature. We don't all have to become Yuccies, we can choose to be well-paid accountants. “Capitalism has expanded its reach to capture the talents of heretofore excluded groups of eccentrics and nonconformists. In doing so, it has pulled off yet another astonishing mutation: taking people who would once have been viewed as bizarre mavericks operating at the bohemian fringe and placing them at the very heart of the process of innovation and economic growth. These changes in the economy and in the workplace, have in turn helped to propagate and legitimize similar changes in society at large. The creative individual is no longer viewed as an iconoclast. He or she is the new mainstream” (Florida, 2002:6). I have never, nor will I ever, understand why novel things are given old names. Charles Handy said in an interview that Yuccies are not creatives. Perhaps they aren't and it may even be better that they are not like the people they usually call creative.

2. EXTRACTING RULES FROM THE MIND

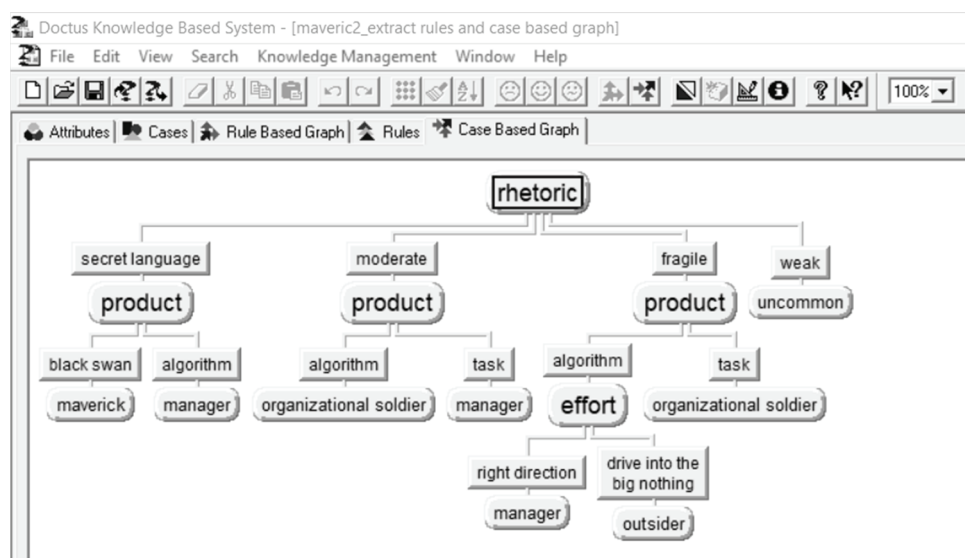
Our knowledge based system, Doctus (Velencei, 2003; Velencei, Dörfler & Baracscai, 2015) practices symbolic representation, symbolic artificial intelligence. The first benefit of symbolic representation of knowledge is that it's humanistic. Knowledge-Based Systems are usually used to evaluate decision alternatives; therefore Doctus belongs to Decision Support Systems as well. Decision alternatives in Doctus are called cases. The evaluation of cases is called reasoning (Baracscai, Dörfler & Velencei, 2005). There are three types of reasoning in Doctus: If the expert can articulate the important aspects

of the decision as well as the rules, the system will trigger these rules to get the evaluation. This is called deduction or Rule-Based Reasoning. It is used when there is no experience in the domain, therefore the situation calls for an Original Decision. If the expert can articulate the aspects but he cannot say which of them are important and he cannot articulate the rules, and yet he is experienced enough (a few dozen cases with evaluation), then this experience can be used to find out the rules describing the cases of his experience using induction, which is the symbolic version of Case-Based Reasoning. As there is extensive experience in the domain, the situation is described as Routine Decision. From the result of induction, the important aspects of the decision can be determined using reduction. This is the third type of reasoning, however, as it can only follow the induction, there is no third type of knowledge base, only two sorts of knowledge bases are built: rule-based knowledge base and case-based knowledge base. When we extracted the reduced decision, taking rules from the tacit knowledge of a decision taker, we experienced that Occam's razor always worked: there were only few, complex rules which were used. The attributes in the reduced knowledge base are those that were in the accepted case-based graph. This means, that the reduced knowledge base provides the same decision proposals (case evaluations) as the original deductive knowledge base but it uses far fewer attributes and far fewer rules. "That reference to tacit knowledge and the concurrent rejection of rules isolates another problem that has bothered many of my critics and seemed to provide a basis for charges of subjectivity and irrationality. Some readers have felt that I was trying to make science rest on unanalysable individual intuitions rather than on logic and law. But that interpretation goes astray in two essential respects. First, if I am talking at all about intuitions, they are not individual. Rather they are the tested and shared possessions of the members of a successful group, and the novice acquires them through training as a part of his preparation for group-membership. Second, they are not in principle unanalysable. On the contrary, I am currently experimenting with a computer program designed to investigate their properties at an elementary level" (Kuhn, 1970:191).

Let us see where the Doctus KBS is useful in applying Occam's Razor to find consistent and relevant behavior patterns by examining a few behavior sample descriptions. Sometimes a case is found, that cannot fit the set and makes serious degenerations to the Case-Based Graph. These cases usually cannot be described with the attributes defined, thus we call them odd-one-outs. The solution for these is to be excluded from the set used as bases for Case-Based Reasoning. Sometimes two (or more) cases are found, that are completely the same, except for the benchmark. It usually means that a new attribute or a new value is needed to be defined, which distinguishes the cases in question. The cases themselves may be modified as well. As can be seen from the Picture 1, the graph on the left is more suited to describing consistent knowledge. The initial knowledge-base consisted of 14 attributes, after Case-Based Reasoning only three attributes remained as a result. It means that these three attributes and their values are enough to describe the cases, namely:

- ✓ rhetoric: (1) secret language (2) moderate (3) fragile (4) weak
- ✓ product: (1) black swan (2) algorithm (3) task
- ✓ effort: (1) one wants what one wants (2) right direction (3) drive into the big nothing

Picture 1: The result of Case-based Reasoning



Source: screenshot by author

In this knowledge-base the maverick's behavior can be described using the following rule:
 IF the rhetoric is 'secret language'
 AND IF the product is 'black swan'
 AND IF effort is 'don't care'
 THEN behavior is 'maverick'.

Picture 2 depicts not only the rules of maverick's behavior but also the others'.

Picture 2: The rules of behavior

rhetoric	product	effort	behavior
secret language	black swan	*	maverick
secret language	algorithm	*	manager
moderate	task	*	manager
fragile	algorithm	right direction	manager
moderate	algorithm	*	organizational soldier
fragile	task	*	organizational soldier
fragile	algorithm	drive into the big nothing	outsider
weak	*	*	uncommon

Source: screenshot by author

According to Richard L. Florida (2002) there are some maverick engineers who are working the miracles, members of an awesome fellowship of the elect. They use a secret language, a code, and with it, they can do just about anything. Perhaps this secret language is the new question. But how could we research it, if it is secret? And so, the first new question could be: Is there a secret language that we do not understand, but we intuit, that it is consistent and those who speak it understand each other? Taleb mentioned in Conclusion Book IV that “In addition to the medical empirics, this section has attempted to vindicate the unreasonable mavericks, engineers, freelance entrepreneurs, innovative artists, and anti-academic thinkers who have been reviled by history. Some of them had great courage—not just the courage to put forth their ideas, but the courage to accept to live in a world they knew they did not understand. And they enjoyed it” (Taleb, 2016). Second question: Is it possible to explain to adults that the iPhone is unbeatable, if the word 'explain' was invented by adults? If there is such a thing as a black swan, great, and if there isn't one, that is great, too.

We are not concerned with how George Best, Steve Jobs and Alexander III of Macedonia are different. (If I were a contemporary rule-based person, I would quickly list three female names here, too.) They are not allowed to use their feet at a handball game, just like everybody else. And they don't. But they do some things differently. We cannot understand them, and even if we did, it wouldn't make the world a better place.

3. DISCUSSION

We should not debate how a maverick's behavior is different from an organizational soldier's behavior. What we should debate is how to examine rhetoric, outcome and effort in the next phase of research. Let us not define maverick behavior as deviance from the organizational soldier, because the soldier is not a deviance from the maverick. Let us pose new questions, for the answers to the old ones only let us specify how much deviance from normal we tolerate. Too many make too good a living from writing about creativity in such a light. As I watch young PhD students read Thomas Kuhn's book, they are unable to accept the possibility of a paradigm shift. They are afraid of both what is and what is not. “'Is' and 'ought' are by no means always as separate as they have seemed. But no recourse to the subtleties of contemporary linguistic philosophy is needed to unravel what has seemed confused about this aspect of my position” (Kuhn, 1970:207). I have the feeling that the time isn't ripe yet for a paradigm shift, and

my scribbles aren't going to start a revolution, either. Most people are convinced that what they believe can be proven to be true. Let us make room for the rule-maker possibilities. If we pose new questions, then perhaps we can find the behavioral rules of mavericks, too.

REFERENCE LIST

1. Baracscai, Z., Dörfler, V. & Velencei, J. (2005). Reductive Reasoning. *Montenegrin Journal of Economics*, 1(1), 59-66.
2. Beadle, P. (2017). *Rules for Mavericks: A Manifesto for Dissident Creatives*. Crown House Publishing Ltd., UK
3. Florida, R. L. (2002). *The rise of the creative class: and how it's transforming work, leisure, community and everyday life*. New York, NY : Basic Books
4. Florida, R., Mellander, C. & King, K. (2015). *Global Creativity Index 2015*. Martin Prosperity Institute, University of Toronto.
5. Gardiner, E. & Jackson, C. J. (2012). Workplace mavericks: How personality and risk-taking propensity predicts maverickism. *British Journal of Psychology*, 103, 497–519.
6. Gardiner, E. & Jackson, C. J. (2015). Personality and learning processes underlying maverickism. *Journal of Managerial Psychology*, 30(6), 726 – 740.
7. Kuhn, T. S. (1970). *The Structure of Scientific Revolutions* (3rd ed.). Chicago, IL: The University of Chicago Press.
8. Taleb, N.N. (2007). *The Black Swan – The Impact of the Highly Improbable*. New York, NY: Random House.
9. Taleb, N. N. (2016). *Incerto 4-Book Bundle: Antifragile, The Black Swan, Fooled by Randomness, The Bed of Procrustes*. Random House
10. Velencei, J. (2003). An Intelligent Portal with Doctus Knowledge Based Expert System. In: W. Chu (Ed.), *Proceedings of the Second IASTED International Conference on Information and Knowledge Sharing* (pp. 235-240), Scottsdale, AZ: ACTA Press.
11. Velencei, J., Dörfler, V. & Baracscai, Z. (2015). Supporting the competent practitioner: Transdisciplinary coaching with knowledge-based expert system. In: V. Dermol, A. Trunk, G. Đaković & M. Smrkol (Ed.), *Proceedings of the MakeLearn and TIIM Joint International Conference* (pp. 2149-2150), Bari, Italy: ToKnowPress.
12. Velencei, J. (2016). ICT will always support the how and not the what. *Transylvanian Journal of Psychology*, 17(2), 181-210.