

ICONS AND ICONS:

DECISION SUPPORT USING COACHING AND EXPERT SYSTEMS

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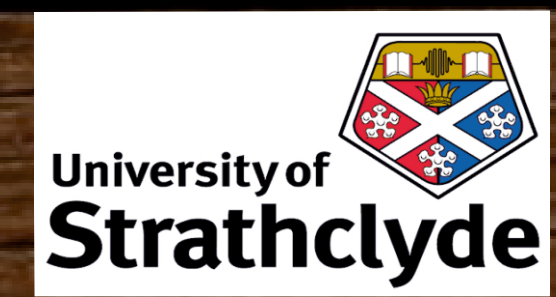
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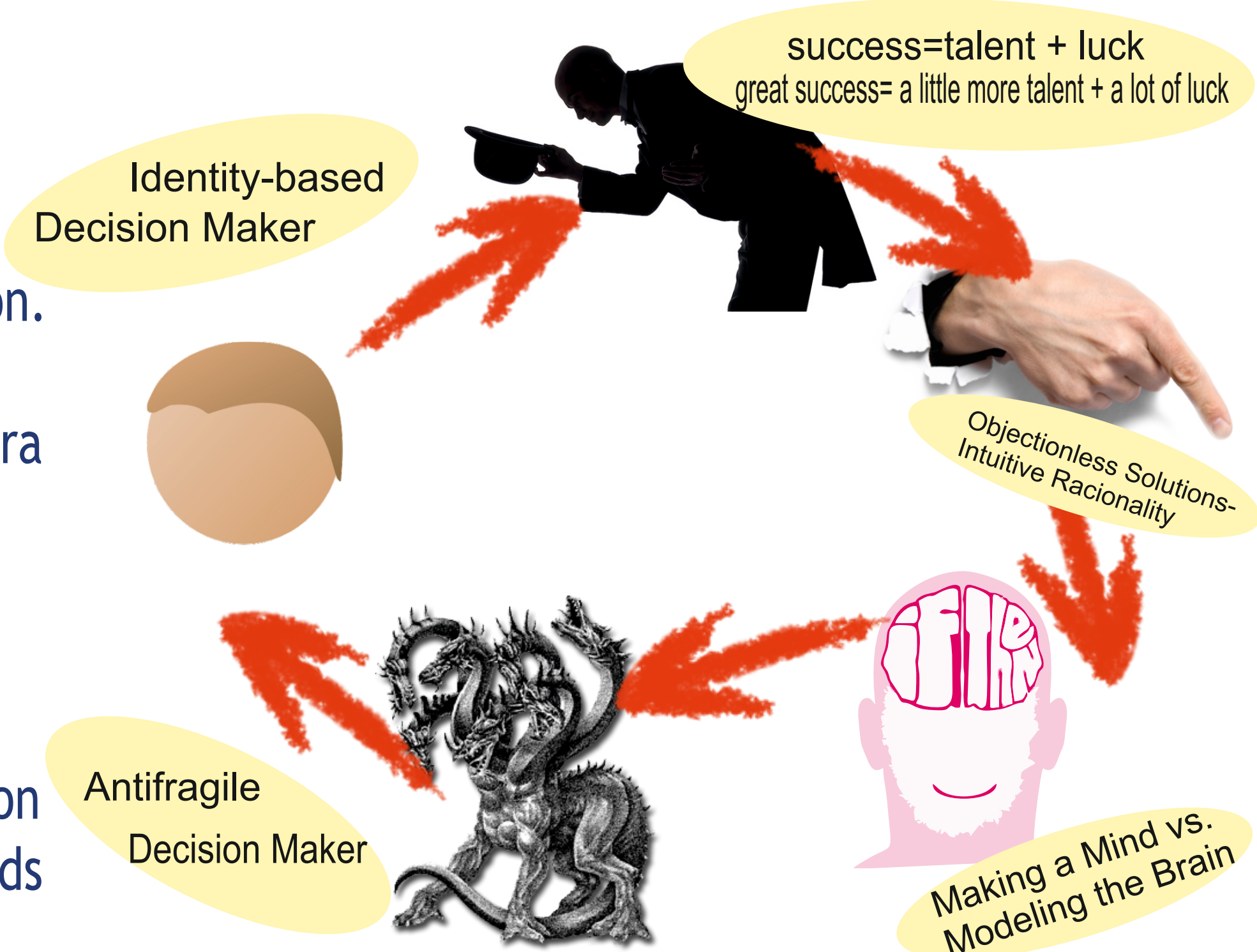


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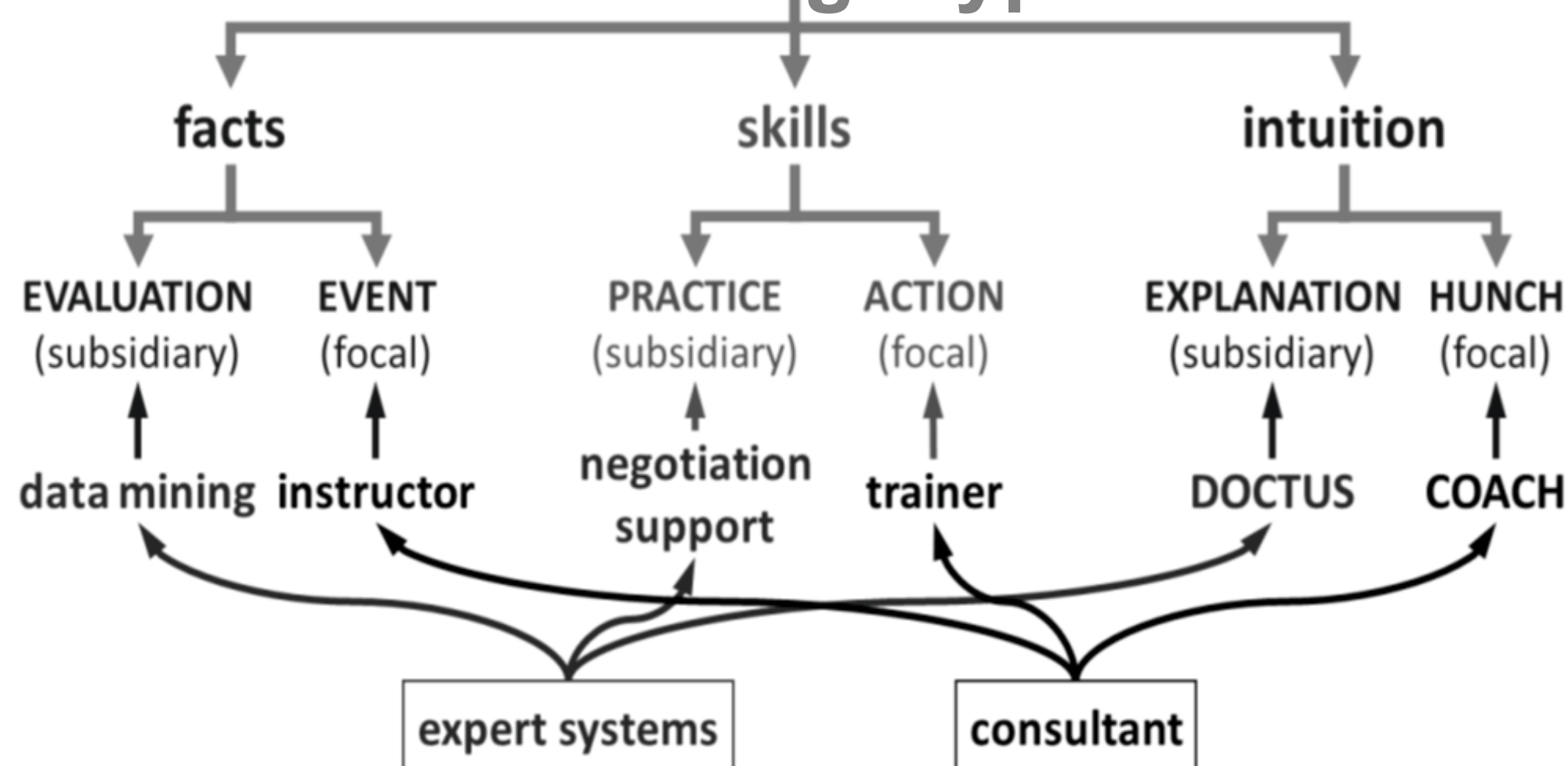


Decision Making 5.0

Based on Daniel Kahneman's very simple formula the decision maker should pay attention at being in the right place at the right time. According to James March decision makers just follow rules, because that is what they expect in organization. Nassim N. Taleb argues that the decision maker can get stronger by failure and become antifragile. Taleb uses the mythological Hydra to illustrate this. The Hydra has many heads. Each time one is cut off, two grow back. Hubert and Stuart Dreyfus suggest that the process of decision making is one of the thinking processes. However, the mind is not the same than the brain. Instead of focusing on the results of brain research, we should use the result of cognitive psychology. Based on Herbert Simon's work on bounded rationality and the satisfactory solution we suggest an intuitive rationality, according to which once the decision taker finds an objectionless solution they accept it and stop searching.



Knowledge types

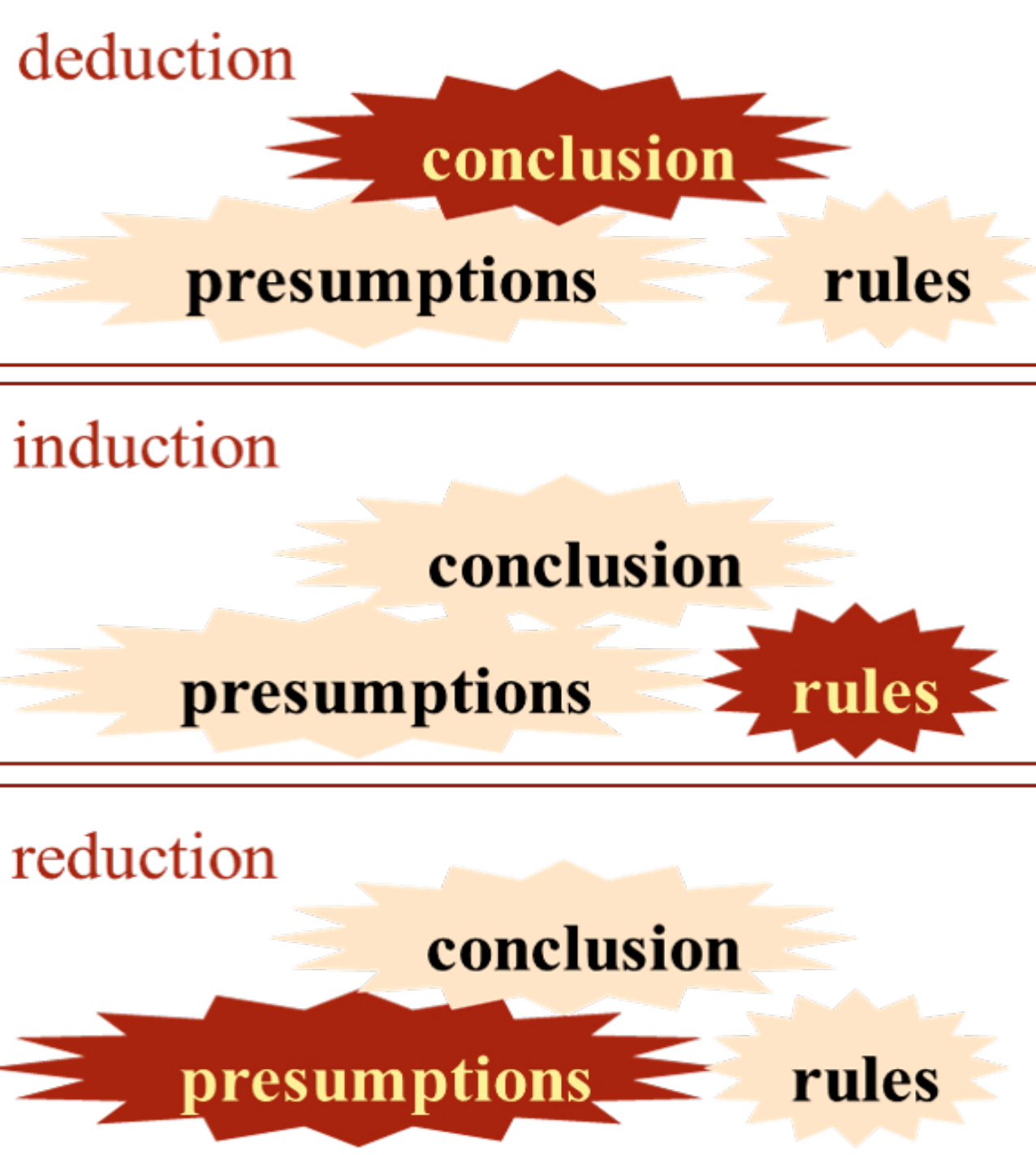


Decision Maker's Knowledge

The super-large decisions that may redefine the organisation we call Icons (with capital 'i'), referring to the notion of Iconic. These decisions require exceptionally high degree of competence. There are also decisions which are insignificant and these do not require any substantial degree of competence; we call these as icons (with lower case 'i') referring to the icons that we need to click or touch in order to run an app on our computers, tablets, smartphones or wearables. It is perhaps obvious that Icons need very different types of decision support than icons. To get a better understanding of this, we need to look at the dominant knowledge types used in the decision situations.

„ / ” cons Call for a Coach

Who is the coach in this new world? To use an example from sport, the coach is the guy running up and down at the sides of a baseball field trying everything to make his team win without ever hitting the ball. How long does (s)he coach the same team? For a few years at the maximum. The coach teaches the players all (s)he is supposed to or can, then moves on. The team hires another coach and the coach is hired by another team. We believe that the coach has nothing but his reputation; so if the coaching has been successful, the reputation increases, if unsuccessful, it decreases.



„ i ” cons Need a Knowledge-Based Expert System

Knowledge-based systems (KBS) work using knowledge bases that are concepts connected with logical «if... then» rules. Expert systems (ES) build knowledge bases acquiring the knowledge from experts. KBS and ES use symbolic knowledge representation. As we aim at supporting the decision takers by providing them with the representation of the expert opinion we usually combine the two labels and call Doctus a knowledge-based expert system (KBES). Working with Doctus for more than twenty years, we had around 140 consultancy projects, the vast majority of them for top executives; in addition to this, it was used in many hundreds of student projects at many universities all over the world and in our own research projects.

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