

Mindspongeconomics

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Abstract

Economics has evolved over time, and it helps to explain and shape the actors' economic activities. Although economics is useful to humans' lives, it is either failed or insufficient to justify many real-world cases, ranging from humans' rapid and/or unpredictable progress in the information age to decision making-selecting mechanism, optimization, gross domestic product (GDP) matter, and so on, raising concerns about contemporary economics' significant limitations, inspiring us to rethink, redefine and reform it in new contexts. Fortunately, the mindsponge theory has been formed recently, allowing me to develop a new branch of applied economics known as "mindspongeconomics – mindspongecon". Mindspongecon refers to both rational and irrational thinking that employs the serendipity-mindsponge-3D knowledge management system (a special information processing system) based on dynamic core values to find high-value solutions/choices that can address many economics' shortcomings. We can now understand and apply this new economics to address numerous worldwide issues in order to achieve long-term development goals.

Keywords: information, core values, rational and irrational thinking, optimization

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1. Is mindspongecon a new decision science?

1.1. Economics' matters

Making choices is often hard for humans, but we must do so many times in our lifetimes. From this view, how to make a high-quality/high value decision) is far more important question/issue. In economics, a decision theory, a rational person is used to either evaluate or perform the choices/decisions. A rational person is defined as someone who is sensible and can make decisions based on logic rather than emotion. But there are many problems now with contemporary economics. This decision theory cannot explain why some people are able to find high-value solutions/options beyond expectation, or why humans achieve unpredictability in economic growth in the face of diminishing resources (Figure 1).

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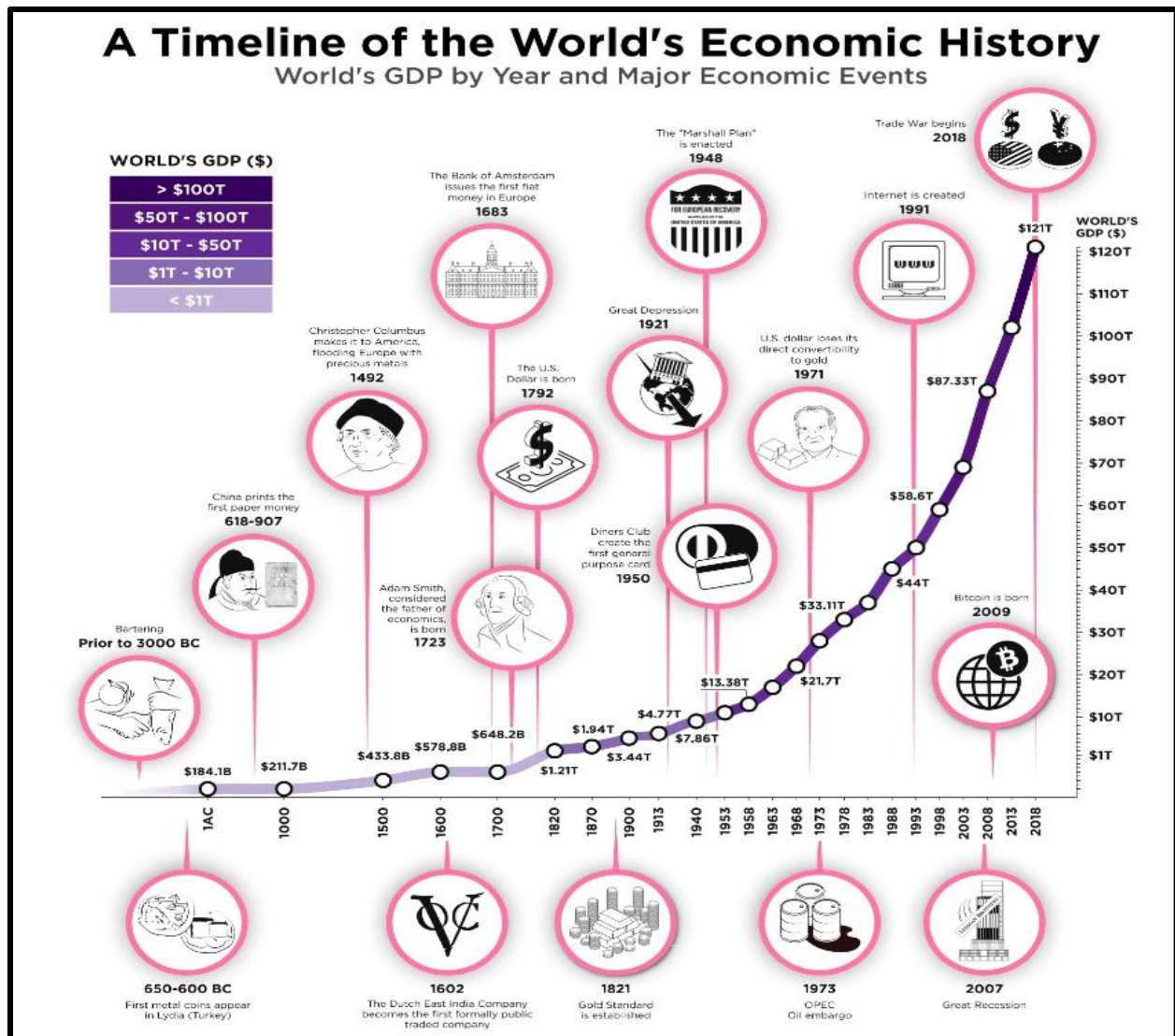


Figure 1. The world's economic growth by time.

Source: <https://howmuch.net/articles/timeline-us-history>

Apart from the optimization matter, many questioned economics because it failed to correctly calculate gross domestic product (GDP) [1–3], which results in many unfavorable consequences such as inequality, environmental problems, etc. In addition, according to many scholars [4], economics is even deemed broken. They argue that mainstream (neoclassical) economics has failed to provide solutions to our problems, from climate change to inequality, yet it remains dominant in government, the Bank of England, academia, and other economic institutions. From these views, we could argue that current economic theory has many significant limitations that motivate us to reconsider, redefine, reform it in new contexts [4,5].

1.2. Introduction to a new economics: Mindspongecon

In this short note, I would like to briefly introduce mindspongeconomics (**mindspongecon – economics+**) as a new decision science in the information age. Mindspongecon is a social science theory that studies decision-making processes that are based on the think-absorb-eject mechanism with the input being information particles from the living environment to optimize utility. Mindspongecon is a combination and expansion of the mindsponge theory [6,7] and behavioral economics [8], neuroeconomics [9], welfare economics [10], experimental economics [11]. This is a filter-based information processing system with an evaluation mechanism linked to pre-set core values. These values and the information received are the basis for actors such as individuals, households, businesses and governments to compare and evaluate, and ultimately to make decisions [12]. The speed of this decision-making process depends on the information processing speed, and the clarity, detail, and priority of core values in their mindset/perception (Figure 2, 3).

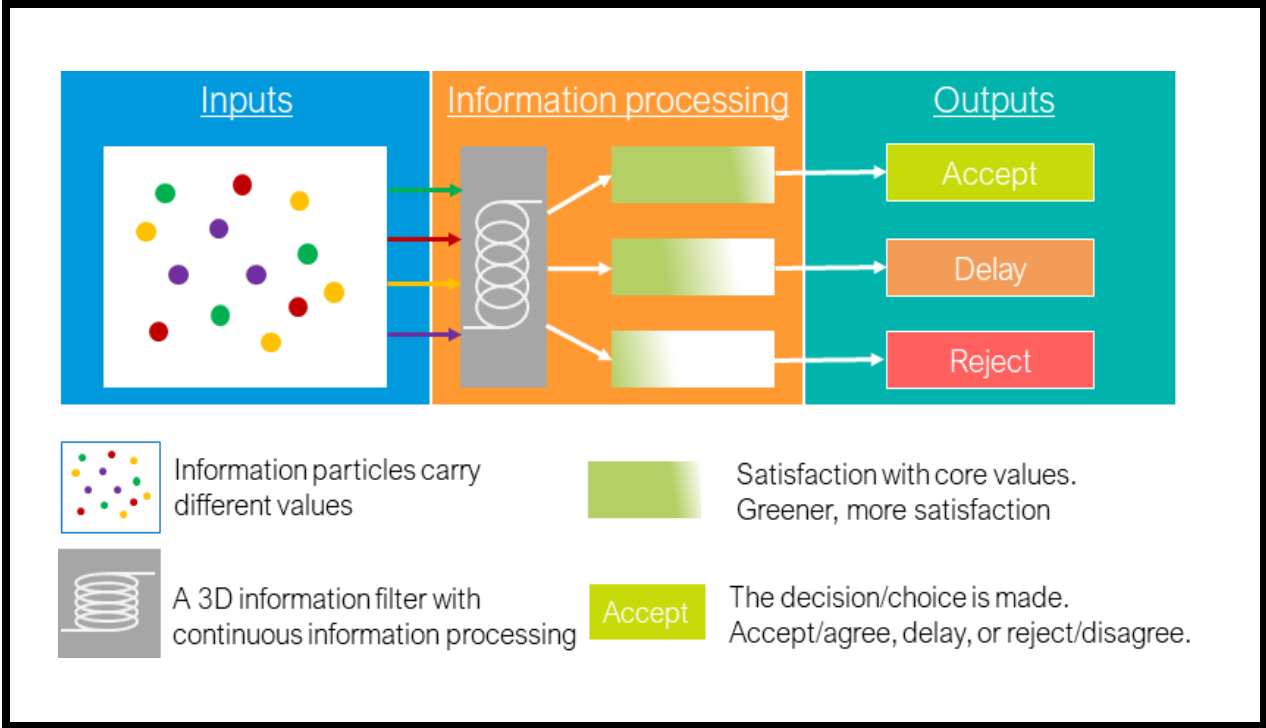


Figure 2. Mechanism/framework for decision making. Source: Own elaboration

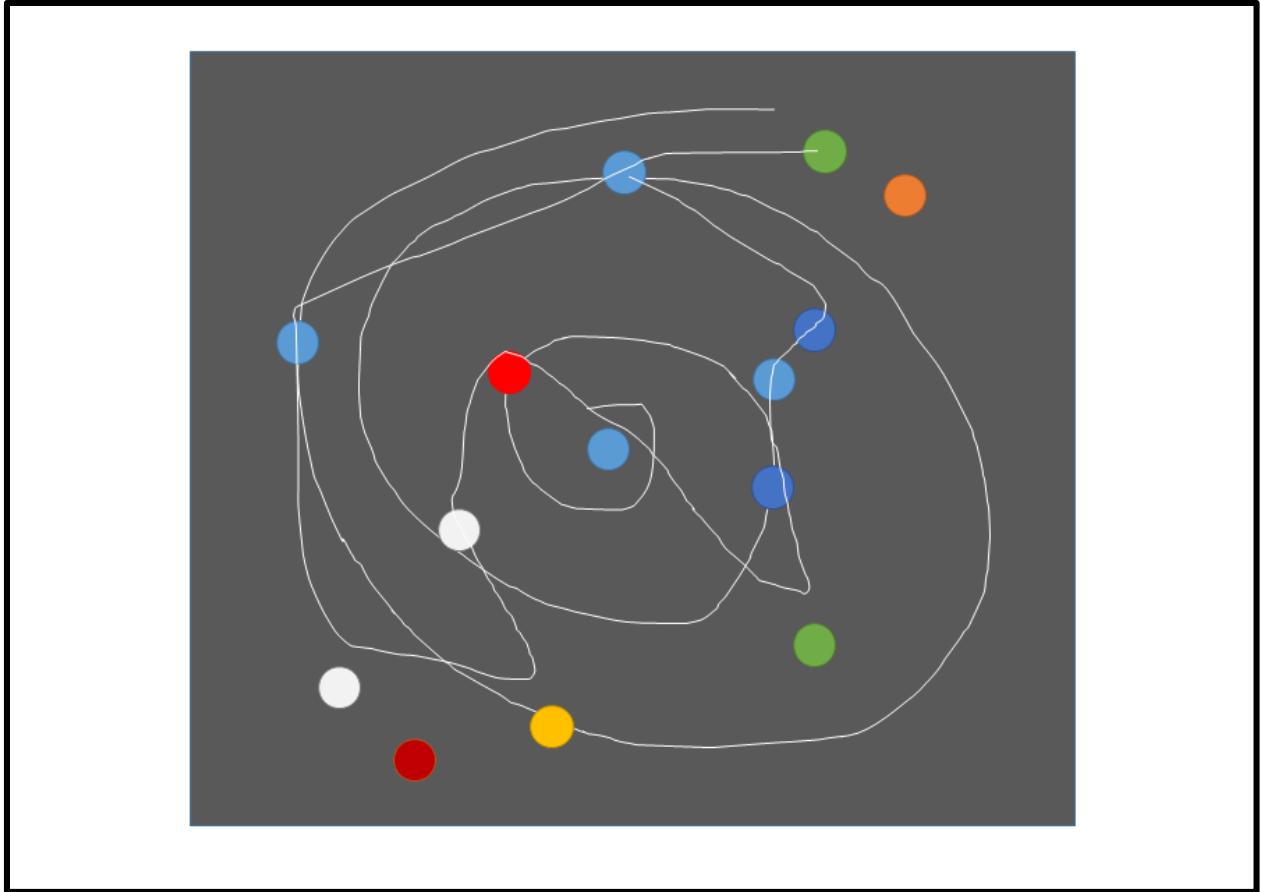


Figure 3. Information-processing mechanism. Source: Own elaboration

Typical core values of the decision-making framework are:

- Cost and benefit
- Use values, (environmental/social) values
- Preference
- Trust
- Scarcity...

2. What makes mindspongecon different, special and unique?

2.1. Mindspongecon helps explain decision-making mechanism and/or predict possible choices/decisions

Unlike contemporary economic theories that mainly focus on modelling economic relationships (e.g. the Law of Supply and Demand...), mindspongecon enriches modern

economic theory by supplementing decision (choice)-making mechanisms with the non-linear thinking thanks to serendipity strategy. Mindspongecon can help explain the invisible hand in economics, answer three basic option-related questions of the economy thoughtfully and clearly: What to produce? How to produce? Produce for whom? This is thanks to the dynamics of the core value systems of economic agents that are formed and developed over a period of time.

Mindspongecon can help to unravel economic relationships and/or shape economic activities associated with the decision making/selection process in terms of consumption, production, distribution of goods and services of economic agents.

- For producers and suppliers, for example, mindspongecon helps assess whether the goods and services they intend to produce are competitive, economically beneficial, and preferred or not. For economic cooperation, for instances, mindspongecon allows the stakeholders to evaluate cooperation opportunities based on the information received through the exchange process and different channels. Based on the level of credibility, economic efficiency when using resources, the degree of compatibility in investment preferences, the stakeholders then consider whether to make economic cooperation decisions or not.
- For consumers, through filtering information about goods and services, mindspongecon allows them to assess the suitability, usefulness, reliability, scarcity and prices. The more a good or service meets the core values, the more likely it is to be purchased.
- For the government/policymakers who are responsible for formulating economic policies, mindspongecon can also be applied. For example, in order to encourage the public's participation in the program of using/prioritizing Vietnamese goods, mindspongecon allows proposals of incentives based on the core cognitive characteristics of mindsponge. The policy will have a higher chance of success if it satisfies more of the core values of the targeted audience.

2.2. Mindspongecon aids in the explanation of high value solutions/decisions/choices found, correct optimization matter, and so on.

Mindspongecon has many attributes, but one of the most important is that it can justify and assess the quality of actors' decisions (choices) based on the extent to which core values are applied. In this sense, this theory combined with 3D theory [12] and serendipity theory [13] investigates how economic agents' ability to seek useful information for making high-quality decision (high value solutions) [13–15]. This is because mindspongecon use both rational and irrational thinking (the non-linear thinking thanks to serendipity strategy) for finding the best decision (Figure 4, 5).

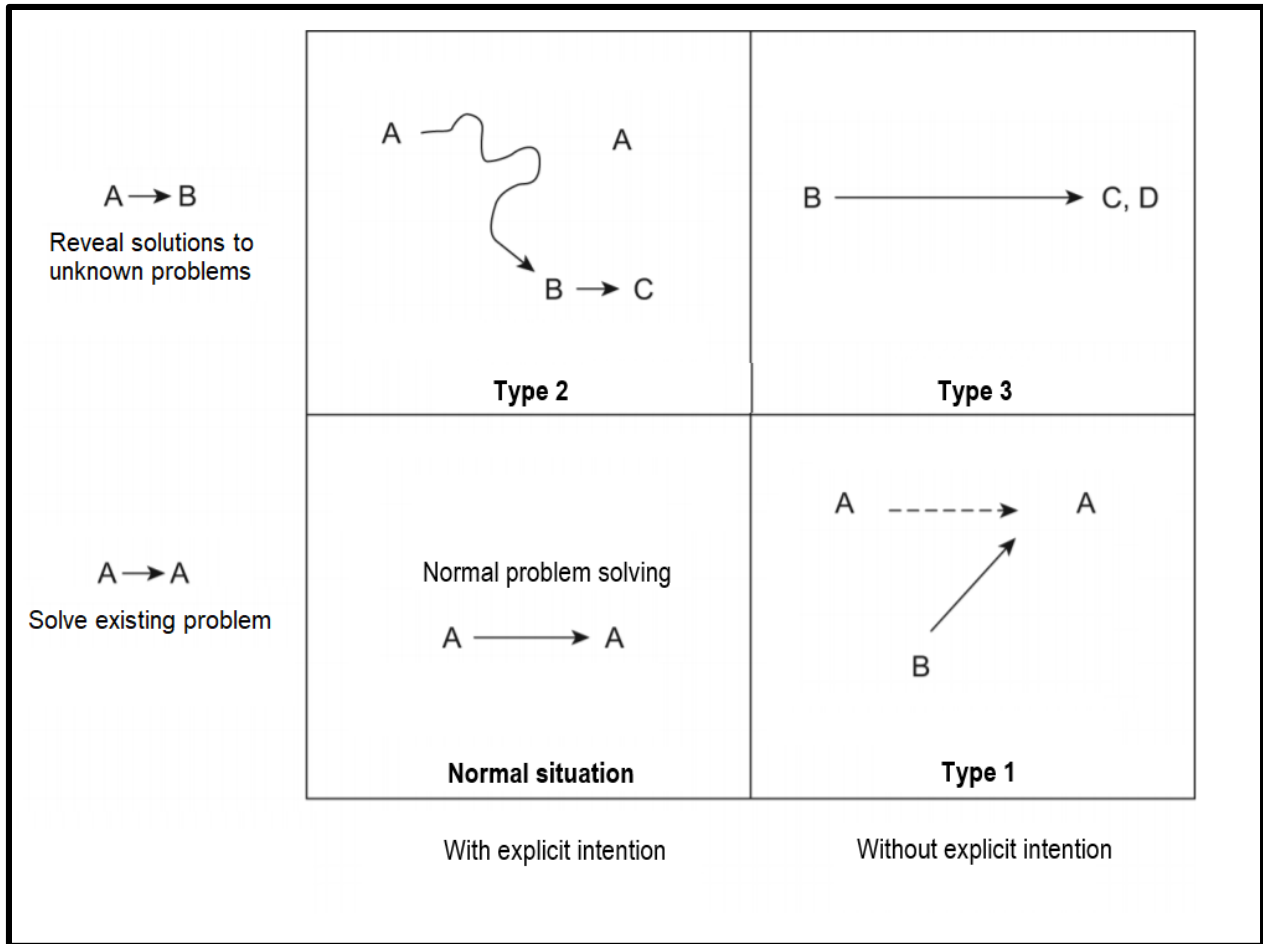


Figure 4: High value solutions associated with serendipity. Modified from Napier and Vuong (2013) and De Rond (2014).

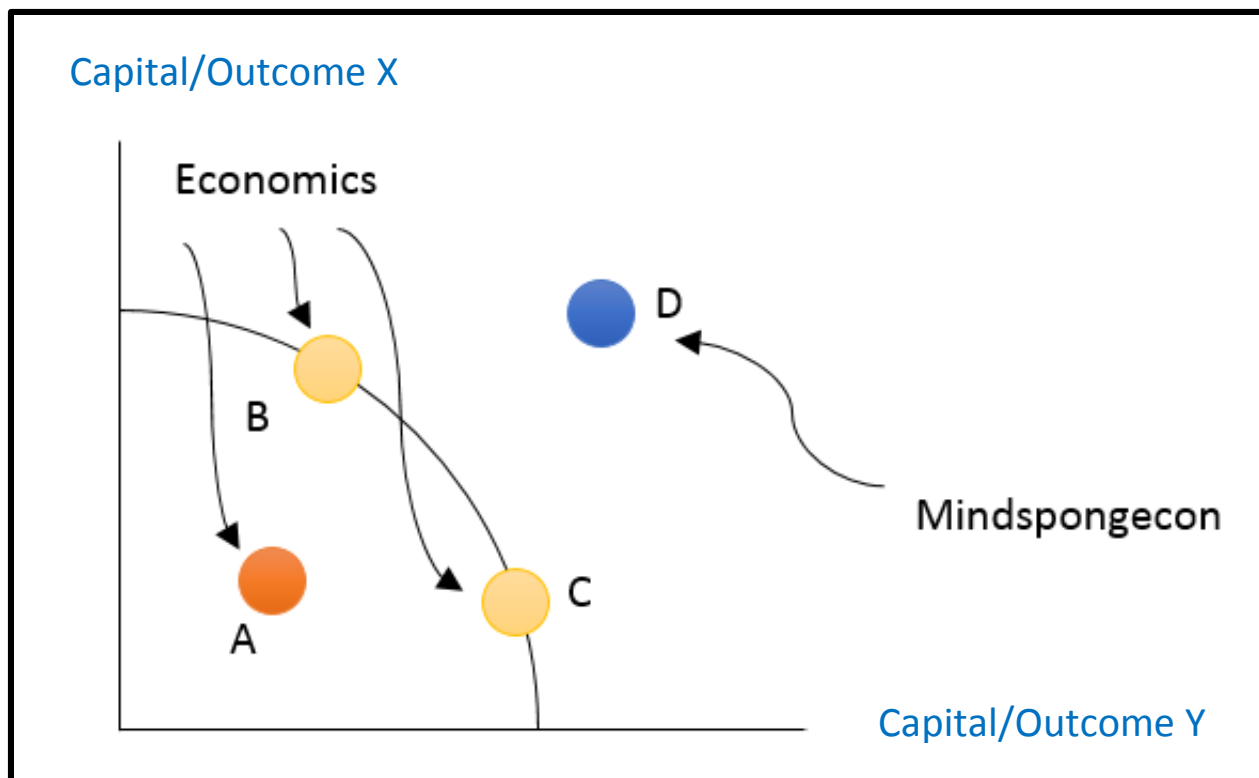


Figure 5. Production possibility frontier in economics and mindspongecon. Source: Own elaboration

2.3. Mindspongecon helps human more connect nature, address GDP matter, contributing to reducing inequality and mitigating climate change, and building a desirable society for sustainable development

GDP (Gross domestic product) is one of the most important metrics in macroeconomics, but its use has been a controversial topic among many economists for many years. From my personal perspective, GDP has its own problem in economics. This is because GDP refers to total economic values of goods and services exchanged on the market, but environmental values [16], are almost not taken into account according to my best knowledge. As a result, the total economic value of goods and services are underestimated, leading to incorrect GDP as a whole. Mindspongecon can help deal with information as a resource using the complete information processing system based on its core value of environmental values. In the meantime, based on the limitation of GDP, of course, it is highly careful to use it to assess the wealth and/or quality of life while what we can do now is to advocate mindspongecon and/or mindspongenviron, a subfield of mindspongecon that deals with environmental problems only, to update the environmental values into GDP, which help people towards building a high value culture, eco-surplus culture. This is because as the environmental values are taken into account, the cost of goods and services are fully estimated, which affect the behaviors

of consumers and produces. People are likely to reduce their utilization of resources. But it is not easy task because most of the economists may have very little knowledge about nature. Hence, they should learn more from Nature to help tackle the environmental pollutions and climate change in the long run.

In summary, mindspongecon, a decision- making theory of applied economics, study how are people's choices made using information- processing mechanism with core values at the center. These values are dynamic and change over time, depending on the think-absorb-eject capacity. In years to come, mindspongecon will continue to evolve.

Box 1. Summary of Mindspongecon's new contributions

- Identify factors that can influence humans' decisions/choice
- Explain the decision/choice-making mechanism of humans including high-value solutions/decisions associated with time scales using both rational and irrational thinking
- Predict the likelihood of humans' possible decisions/choices
- Address/correct many contemporary economics' issues such as optimization, GDP, etc.
- Help build a desirable society based on high-value culture for the sustainable development.

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