



Behavioural Economics

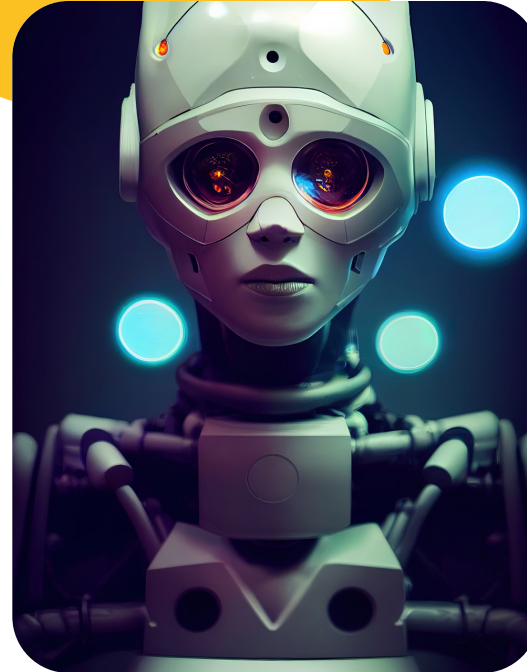
A FIRST-TIMERS' TAKEAWAYS AND
DISCUSSION IN THE SFI CONTEXT

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Econs vs. Humans

Rational choice theory states that individuals use rational calculations to make rational choices and achieve outcomes that are aligned with their own personal objectives.

In reality, we find this isn't always the case. Humans actually make decisions based on all kinds of reasons and influences.



ECONS

Perfectly Rational

Unlimited computation and foresight



HUMANS

Bounded Rationality

Limited capacity and emotional

Context

COMPROMISE EFFECT

When people choose between three options that vary along two dimensions, the option in the middle (which is average on both dimensions) tends to get chosen more often.



SMALL



MEDIUM



LARGE

Context

COMPROMISE EFFECT

People still choose the medium cup even though it is now less coffee.

Not enough



SMALL

Just right



NEW MEDIUM

Too much



LARGE

Framing

GAIN VS. LOSS (LOSS AVERSION)

Presenting the same outcome as a loss has a greater psychological effect than presenting it as a gain.

PENNIES A DAY

Presenting a large dollar amount as an equivalent number of dollars per day could increase the acceptability of this expense. However, this effect reverses if the per day expense is very large.



Defaults

OPT-IN VS. OPT-OUT

The default choice in any decision task refers to the outcome that would happen if the individual did not make a choice. If the likelihood that people will choose not to choose is high, making a desired outcome the default will increase the likelihood of it being chosen.



What is Behavioural Economics?

Behavioural economics studies the effects of psychological, cognitive, emotional, cultural and social factors on the decisions of individuals and institutions and how those decisions vary from those implied by classical economic theory.





Expected Utility Theory

This is a theory which estimates the likely utility of an action when there is uncertainty about the outcome. It suggests the rational choice is to choose an action with the highest expected utility.

$$U = \sum w_i u_i(x_i)$$

Where w_i = weight of the i 'th attribute

Five Axioms of Rational Choice

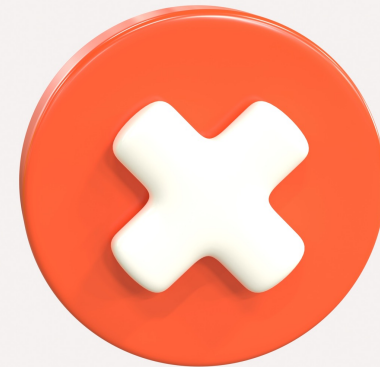
1. Completeness
2. Transitivity
3. Substitution
4. Continuity
5. Monotonicity



Five Axioms of Rational Choice

Completeness

Decision makers should be able to choose between X and Y , or are completely indifferent.



Five Axioms of Rational Choice

Transitivity

If X is preferred over Y and Y is preferred over Z that X is also preferred over Z.



Five Axioms of Rational Choice

Substitution

If I like X and Y equally, then I should be indifferent to two lotteries where either X or Y are the prize.

- Cancellation Principle
- Allais Paradox



4C's of Rational Choice

COMPLETENESS

Being able to see far down the road or knowing all the facts.

CONSISTENCY

Consistency in decision-making, both internal and external.



COGNITION

The ability to think through problems and make unemotional decisions.

COMPUTATION

The ability to process large amounts of information and make complex calculations.



If we know that people so often don't act in a way that follows the 4C's and violates the principles of rational choice, are people irrational or is it perhaps that the theory is not rational for how humans actually act?

— Dilip Soman —





Behavioural Economics to the rescue

Increase understanding and offer strategies to steer decision-makers towards a desired outcome.

Who decides what's right?

Typically, this ownership falls into three categories:

Parental Body

Majority

Individual



Strategies

- 01 RESTRICTIONS**
Bans, regulated supply, product availability
- 02 INCENTIVES**
Subsidies on taxes, discounts or promotions
- 03 PERSUASION AND INFORMATION**
Disclosures, advertising
- 04 NUDGING**
Choice architecture

Nudging

“A nudge is any aspect of the choice architecture that alters people’s behaviour in a predictable way without forbidding any options or significantly changing their economic consequences. To count as a mere nudge, the intervention must be easy and cheap to avoid. “

– Thaler and Sunstein



Four Dimensions of Nudges

01

BOOSTING SELF-CONTROL
VS. ACTIVATING A
DESIRED BEHAVIOUR

02

EXTERNALLY IMPOSED
VS. SELF-IMPOSED

03

MINDFUL VS. MINDLESS

04

ENCOURAGE
VS. DISCOURAGE

Table 1. Examples of Nudges

		MINDFUL		MINDLESS	
		ENCOURAGE	DISCOURAGE	ENCOURAGE	DISCOURAGE
ACTIVATING A DESIRED BEHAVIOUR	EXTERNALLY-IMPOSED	Simplifying tax rules to make tax filing easier.	Placing signs to remind people not to litter.	Advertising that most people are recycling to increase recycling efforts.	Using fake speed bumps to discourage speeding ⁹ .
	EXTERNALLY-IMPOSED	Simplifying application processes for college grants to encourage higher-level education ¹⁰ .	Installing car dashboards that track mileage to reduce gas usage ¹¹ .	Automatically enrolling for prescription refills to encourage taking medication.	Placing unhealthy foods in harder to reach places ¹² .
BOOSTING SELF-CONTROL	SELF-IMPOSED	Maintaining an exercise routine by agreeing to pay a small penalty if a gym session is missed ¹³ .	Avoiding drunk driving by hiring a limo service beforehand ¹⁴ .	Joining a peer savings group to encourage saving money ¹⁵ .	Channelling money into a separate account to reduce the likelihood of it being spent ¹⁶ .

Process for Designing Nudges



Process for Designing Nudges



At this stage it's helpful to ask questions around four different aspects of the decision-making process:

1. The properties of the decision – incentives, motivations, and attention the decision receives.
2. Information sources and how information related to the decision is gathered and presented.
3. Features of the individual's mindset and whether emotions influence the outcome of the decision.
4. Environmental and social factors – peer pressure, lengthy application processes.

Process for Designing Nudges



1. Are they aware of what they need to do but unable to accomplish it?
2. Are they motivated to impose a nudge themselves?
3. Are there cognition issues at play?
4. Is the desired action not happening because of a competing action?

Process for Designing Nudges



What are the constraints?

What nudges can be applied quickly and easily?

Process for Designing Nudges



Prioritize nudges and test for effectiveness.

How might we integrate the insights derived from the field of behavioural economics in our work in SFI?

How can we use the decision mapping and the decision influencing strategies in conjunction with other SFI tools to enrich understanding?



Behavioural Econ. + SFI

01

SYSTEMS MAPPING AND
DECISION-MAKING ARCHITECTURE

02

STAKEHOLDER/INFLUENCE MAPPING
AND FOUR DIMENSIONS OF NUDGES

03

DECISION-MAKING BEHAVIOUR
AND FORESIGHT WORK

**What are other ways you
think Behavioural Economics
could be used in SFI?**

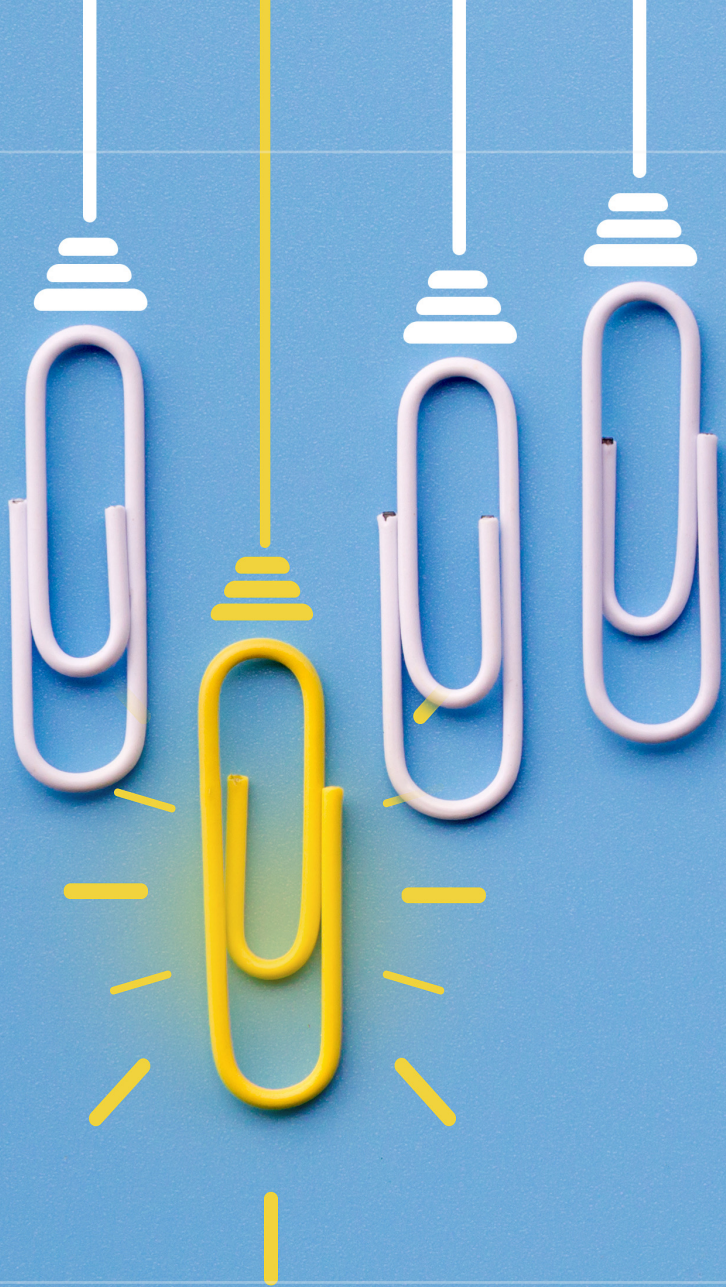


With great power comes great responsibility

POTENTIAL RISKS?

PROS?

CONS?



THANKS

I HOPE YOU FOUND THIS ENLIGHTENING