16 Key cognitive biases that impact creativity and the innovation process.

Confirmation bias.
We believe what we want to believe by favouring information that confirms pre-existing beliefs or preconceptions. This results in looking for creative solutions that confirm our beliefs rather than challenge them. Tread carefully when you "disagree with" or discard evidence brought forward by the team!

False causality.
Citing sequential events as evidence the first caused the second. This can occur within the Design Thinking empathise phase where you are intentionally seeking confirmation of causality between what people say vs. what they do, leading to taking the wrong problems or needs forward to solve. Question yourself: can you really prove causality? Or only the correlation. Or only sequence?

Conformity bias.
Choices of mass populations influence how we think, even if against independent personal judgements. This can result in poor decision making and lead to groupthink which is particularly detrimental to creativity as outside opinions can become suppressed leading to self- censorship and loss of independent thought. When you spot group think within a team, try to gain everyone's personal perspective separately first (either through a silent, written brainstorm or through one on one conversations) before discussing the topic in a team setting.

Pro-innovation bias.
New innovations should be adopted by all members society (regardless of the wider needs) and are pushed-out and accepted regardless. Novelty and 'newness' are seen as inherently good, regardless of potential negative impacts (inequality, elitism, environmental damage etc.) resulting in new ideas and concepts generated being judged through somewhat rose tinted spectacles. Question the idea: are we judging it too much on its level of novelty or "sexyness"? Without falling into status quo bias, are we taking all possible (also negative) impacts into account?

Projection bias.
From behavioural economics, over-predicting future tastes or preferences will match current tastes or preferences. This bias has particular influence as new innovations are conceived in the now and are projected into the future when they enter markets resulting in over value-appreciation of consumer preferences.

Action bias.
When faced with ambiguity favouring doing something or anything without any prior analysis even if it is counterproductive. Team members can feel that they need to take action regardless of whether it is a good idea or not. This can be an issue when under time pressure in strict design sprint workshops for example. When a team walks into this, question whether their actions have clear reasoning (why?) behind them and are based on evidence of their chosen direction. On the other opposite end of the spectrum avoid "analysis paralysis" by encouraging pragmatic decision making based on partial evidence.

Strategic misrepresentation.
Knowingly understating the costs and overstating the benefits. When developing innovation concepts, ballpark figures and business model prototypes, teams are prone to understating the true costs and overstating the likely benefits in order to get a project approved (which happens all the time in large governmental contracting). Over-optimism is then spotted and challenged by managers assessing how truly innovative team outcomes are. Challenge your teams: are they showing the full image of costs? What about FTE's and other time investments?

Anchoring bias.
Being influenced by information that is already known or that is first shown. This causes pre-loaded and determined tunnel vision and influences final decision making. We deliberately manipulate team members' minds by 'pre-loading' them one of our warm-up exercises to demonstrate this bias at play. The impact is highly-significant on creative thinking and outcomes.

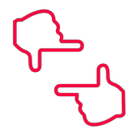
Authority bias.
Favouring authority figure opinions ideas within innovation teams. This means that innovative ideas coming from senior team members trump or better all others, even if other concepts, ideas and inputs could be more creative and relevant to problem solving. Take this into account, especially when you yourself speak up. Whatever you as a sponsor, say will carry a lot more weight than any other opinion.

Self serving bias.
Favouring decisions that enhance self-esteem. This results in attributing positive events to oneself and conversely negative events to others. Within innovation workshops this can mean that decisions made can be loaded with personal agenda's rather than customer and business logic for the company. Encourage team members (or yourself) to look at the idea from different points of view (other departments, stakeholders, clients, etc.) to truly gauge its merit objectively.

Bandwagon bias.
Favouring ideas already adopted by others. This is especially influential when linked to authority bias. Bandwagon effect is a common occurrence we see in workshops. The rate and speed at which ideas are adopted by others (through discussion, ...) can significantly influence the likelihood of those ideas and concepts being selected by the group and taken forward. Do you like a teams idea just because you've seen it done before? Are you favouring ideas just because other banks do them too?

Status-quo bias.
Favouring the current situation or status quo and maintaining it due to loss aversion (or fear of losing it) and do nothing as a result. This is a subtle bias on an emotional level that makes us reduce risk and prefer what is familiar or "the way we do things round here" as it is known. It has severe consequences when seeking out new ways to creatively solve needs and problems. When you dislike an idea, ask yourself: "Is this just me sticking to what I know?"

Loss aversion bias.
Once a decision has been made, sticking to it rather than taking risks due to the fear of losing what you gained in starting something and wishing to see it finished. We also attach more value to something once we have made an emotional investment in it. As a consequence of effort, time and energy put into creative thinking, team members can become emotionally attached to their outcomes. To remedy this, the 11th commandment: "thou shalt not fall in love with thy solutions".



Framing bias.
Being influenced by the way in which information is presented rather than the information itself. We see this one all the time particularly when developing prototypes for pitching as well as in presenting polished slides. People will avoid risk if presented well and seek risk if presented poorly meaning that decision making logic can easily be skewed. When judging a team's pitch: are you judging the content? Or the delivery?

Ambiguity bias.
Favouring options where the outcome is more knowable over those which it is not. This bias has dire impacts innovation outcomes because the process is fundamentally risky and unknown process. If team members subconsciously favour known known's, you will most likely follow know knowns and previously trodden paths. When disliking an idea or way of working: think for a second. Is it based on merit or iust because it's new and unknown?

Feature positive effect.
(close links with optimism bias): due to limited time or resources, people tend to focus on the 'good' benefits whilst ignoring negative effects even when the negative effects are significant. This is influential when deep-diving into specific new feature sets for new concepts (especially when coupled with loss aversion bias), because it means that teams will overlook missing information especially when it is outside expertise resulting in taking ideas forward with critical flaws.

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3 steps how to de-bias you and your teams
Spot the biases. Identify the 16 innovation specific biases affecting you or your team at key moments by listing them individually.

Know & conquer your enemy. Reflect and challenge biases identified by openly discussing impacts on current decision making at key decision making points. Overcome Innovation Biases. Flip, reverse, remove biases identified by asking questions like: What if x, y, z bias did not exist at this moment? What if the opposite of this bias were true at this point? Would you individually (or as a group) make the same decision in light of new awareness?

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