

ARTICLE

# THE ANATOMY OF BAD DECISION MAKING AND THE ROLE OF NEUROSCIENCE AND THE SECOND TRACK IN IMPROVING DECISION MAKING

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**Any poor decision can be blamed on insufficient information, but the paralysis provoked by too much data can be as damaging as snap decisions based on too little. Human judgement must find the right balance between analysis and action, prudence and reform. Entrepreneur Peter Fritz AO and writer Nicholas Mallory discuss the individual and organisational factors behind bad decision making and how it can be improved in business and government today.**

## INTRODUCTION

“To err is human”, wrote Alexander Pope<sup>1</sup> in urging people to forgive the missteps of others. We all make hundreds of decisions every day, and even the simplest and most mundane errors can have severe consequences – from crossing the street without looking to cutting up food without care. More seriously, the blunders made by senior decision-makers in politics or commerce can have calamitous effects on other people and the common good. It has never been more critical to understand the drivers behind bad decisions, investigate the brain processes that may empower them, and develop methods to improve decision making.

While blinkered personal or political motivations can trump common sense or social conscience, a lack of care or research in making decisions can backfire and changing circumstances can make fools of us all. History is littered with examples of people who made the wrong moves for the best of reasons.

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1. Pope, 1711

Organisational decision-makers, for example, tend to be risk-averse, given the responsibilities of their position. The Decca record label famously plumped for the popular, London-based Tremeloes over an obscure beat combo from far-off Liverpool,<sup>2</sup> while Excite CEO George Bell passed on buying Google for just \$750,000 in 1999,<sup>3</sup> Blockbuster spurned Netflix for a bargain \$50 million in 2000.<sup>4</sup>

Other decisions appear trivial at the time but may have calamitous unforeseen consequences. Thomas Austin released thirteen rabbits on his estate in Victoria in 1859 to shoot for sport – seeding a devastating plague that topped six hundred million by 1940.<sup>5</sup>

Some people make a series of errors and are dogged with misfortune. American scientist Thomas Midgley Jr.<sup>6</sup> blundered more than most, pushing the adulteration of petrol with brain-damaging lead, encouraging the use of ozone-destroying chlorofluorocarbons in fridges and industry eventually strangling himself in a pulley he had devised to help him sit up in bed after contracting polio.

A willingness to forgive well-intentioned people who make mistakes should not reduce efforts to understand and improve organisational decision making. While innumerable circumstantial factors can be found in any misstep, a series of common themes also emerge,<sup>7</sup> while insights from the fast-developing sphere of neuroscience, and the success of the Second Track's approach,<sup>8</sup> offer hope that better decision-making processes can be adopted in the future.

## FACTORS BEHIND BAD DECISIONS

While power-hungry tyrants,<sup>9</sup> profit-hungry companies<sup>10</sup> and narcissistic sociopaths<sup>11</sup> will always ignore their disastrous impact on others, even well-intentioned, well-informed people make poor decisions sometimes. Anyone can stumble when pressed for time, become overwhelmed by complexity or be wrong-footed by events. However, despite our natural inclination to find and blame others or the stars, all too often the fault is our own. This is cause for optimism, as it means we have the power to recognise, address and rectify these faults, rather than remain pawns of a capricious universe.

Decision making is always a matter of judgement, and bad decisions may result from a surfeit as well as a deficiency of any factor. Any poor decision can be blamed on insufficient information, for example, but the paralysis provoked by too much data can be as damaging as snap decisions based on too little. In all the factors sketched below, human judgement is required to find the right balance between analysis and action, or prudence and reform.

Many decision makers often **fall back on past practice** rather than assume a true leadership role and consider original approaches as circumstances change. Senior decision makers who rose to prominence through a particular method will usually repeat it, regardless of its utility in a new role or challenge,<sup>12</sup> while well-established companies tend assume future results will extrapolate from the past, leaving them vulnerable to rapid disruption.<sup>13</sup>

2. Mosley, 2019

3. Weintraub, 2010

4. Zetlin, 2019

5. Zurski, 2017

6. Larsen, 2021

7. Farnam Street, n.d.

8. Fritz, 2019, 2020, 2021a, 2021b; Fritz-Kalish, 2019; Massingham, 2020; Massingham, Fritz-Kalish and MacAuley, 2020

9. Panné, 1999

10. Atiyeh, 2019

11. Serwer, 2021

12. Scragg, 2021

13. Goh, 2021

As business professor Sydney Finkelstein, author of *Think Again: Why Good Leaders Make Bad Decisions and How to Keep it From Happening to You*, observes, “Leaders tend to rely on experience that seems useful but is actually sometimes dangerous. We always talk about how important experience is. I think we overstate experience, because it doesn’t exactly fit the situation, you’re in. You’re liable to rely on it in a way that’s just not going to be that helpful”.<sup>14</sup>

Conversely, companies which adopt a ‘not invented here’ mindset – or new hires eager to make their mark – may abandon tried and trusted methods to implement disastrous new methods merely for the sake of it.<sup>15</sup>

The COVID-19 crisis shows the danger of **failing to prepare for future contingencies**.<sup>16</sup> While the likelihood of a global pandemic in any particular year is small, history shows the certainty of plagues appearing and sweeping the world with devastating effects.<sup>17</sup> While the creation of standard vaccine frameworks after SARS allowed the rapid deployment of effective COVID jabs, the initial lack of medical stockpiles and effective quarantine contingencies exposed governments around the world to justifiable criticism.

No administration wants to invest in capacity which may lay unused – or only benefit its successors – but a modicum of proper preparation could have saved countless lives as well as reduced the massive economic and social toll of 18 months of shutdowns and isolation. Similarly, managers rewarded for adopting just-in-time stocking and cutting staff to the bone faced sudden and devastating shortages when supply chains were affected.

Most decision makers are optimists by nature, as this energy drives their interest in public involvement and personal advance. Some executives and politicians also progress by placing the best gloss on events, rather than admitting, examining and correcting their mistakes. Unfortunately, neglecting the possibility of negative events and **rejecting worst case scenarios** leaves them unprepared for when they occur. Individuals, groups and nations fall into the trap of thinking they are somehow special or immune from the forces which affected their predecessors or peers. Each pandemic, conflict, or market crash<sup>18</sup> then takes the world by surprise and underlines the need for an appreciation of history as well as economics at the highest levels.

Prolonged **prevarication** can be as damaging as a swift but misguided choice,<sup>19</sup> but critics of inaction fail to appreciate its attractions for decision makers. While the media and political activists often paint issues as black or white, leaders are besieged by a cacophony of competing interests. Everyone tends to put off complex decisions, particularly when wicked problems offer no good answers, and a promotion away from the problem may rely on remaining a ‘safe pair of hands’, rather than embarking on radical reform. Governments often use public inquiries to postpone as much as to inform difficult choices, buying time in the hope the problem will fade from popular concern.

A less forgivable flaw is a **lack of strategic alignment** between tactics and strategy. Expedient steps to appease a passing public concern can undermine progress to achieve a greater goal, if tactics are not linked to an overall strategy.

14. White, 2009

15. Watts, 2020

16. Gluckman and Tyler, 2020

17. Jarus, 2021

18. Givens, 2021

19. Although “he who hesitates is lost” is the usual phrase, it was Joseph Addison, in his 1712 play *Cato*, who first noted “the woman that deliberates is lost”.

**Organisational inertia** and **complex chains of command** can also impair decision making. Leaders of rigid hierarchies tend to be shielded from unpalatable information lest the messenger be blamed, while lower down the ladder, the experience and ideas of skilled frontline operators is ignored, and initiative is punished rather than encouraged. The best leaders hire people more intelligent than themselves, rather than mediocrities they can dominate, secure in the knowledge that better organisational performance will benefit rather than threaten their position.

Governments and companies tend to be run by generalists, rather than technocrats, for very sound reasons,<sup>20</sup> but their **lack of technical depth** can be exposed in fast-moving situations where complex technologies and concepts are involved. If decision makers are forced to rely on others' knowledge and expertise without any perspective of their own, they will struggle to judge and integrate that information to make effective choices.

This underlines the importance of leaders consulting widely, rather than relying on a handful of trusted yes-men.<sup>21</sup> Conversely, people may be promoted into decision-making positions because of exceptional technical skills, but lack the leadership, communication and analytical qualities required of their new position.<sup>22</sup> An inability to create and lead teams, inspire peers and motivate subordinates can quickly undermine trust in whatever decisions are made, even if they are the right ones.

A **failure to communicate** the rationale behind decisions, or evasiveness around their costs, uncertainties and calculations behind it, can hamper

any decision maker. The best leaders not only make good decisions, but have the communication skills to rally their colleagues, companies or countries behind them.<sup>23</sup> Unfortunately, highly educated decision makers have a history of scorning popular communication channels, from tabloids and TV in the past to social media today, because they themselves do not use them.<sup>24</sup>

Many other factors could be alluded to, from a focus on corporate politics rather than commercial success to a surfeit – or deficiency – of personal self-confidence. Decision makers often pay more attention to some facts rather than others, cleaving to their personal beliefs or prejudices rather than the evidence in front of them. Similarly, humans are subject to confirmation bias – selecting evidence which supports our prior beliefs while ignoring data which undermines them.<sup>25</sup>

People will choose the better option out of two, for example, rather than seek alternatives to either. They will also tend to use tools or techniques in traditional ways – or believe they must invent new tools entirely – rather than employ existing resources in new ways to create value. This 'functional fixedness' is a common flaw, so much so that tests of suggesting alternative uses for common objects have been used to evaluate intelligence itself.<sup>26</sup>

While the ability to analyse data to find patterns is the foundation of science, it can also lead us astray. The gambler's fallacy,<sup>27</sup> for example, sees out brains invent links between independent variables, hindsight bias<sup>28</sup> makes people think malleable events were inevitable, 'the IKEA effect'<sup>29</sup> means we

20. Runciman, 2018

21. Allen, 2018

22. Wagner, 2018

23. Owasi, 2020

24. Fujiwara, Müller and Schwarz, 2020

25. Nickerson, 1998

26. Lambert, 2013

27. Victorian Responsible Gambling Foundation, n.d.

28. Psychology Tools, n.d.

29. The Decision Lab, n.d.

over-value things we helped create ourselves, and loss aversion<sup>30</sup> makes us value current possessions over greater future gains.

More fundamental forces are also at play. Humans evolved as members of families and tribes, for example, and we relied on those groups for our very survival. We therefore remain more afraid of being ostracised from a group more than being wrong about any decision.<sup>31</sup> Any number of studies point to people's predilection for following the crowd<sup>32</sup> in the most trivial or extreme circumstances, rather than acting rationally or in our own best interests.

As Julia Coultas of University of Essex notes, "For an individual joining a group, copying the behaviour of the majority would be a sensible, adaptive behaviour. A conformist tendency would facilitate acceptance into the group and would probably lead to survival if it involved the decision, for instance, to choose between a nutritious or poisonous food, based on copying the behaviour of the majority".<sup>33</sup> The bandwagon effect has a strong evolutionary rationale, but without understanding the social psychology of group dynamics, this cognitive bias can lead us astray in modern life.

An influential study by French psychologists Serge Moscovici and Marisa Zavalloni<sup>34</sup> showed how poorly moderated group discussions tend to harden the opinions of participants rather than challenge them, not least because people enjoy the company of others who agree with them. Just as children copy adults to learn how to behave, so adults look for behavioural cues from others. In his bestselling book *Influence: The Psychology of Persuasion*,

psychologist Robert Cialdini writes: "Whether the question is what to do with an empty popcorn box in a movie theatre, how fast to drive on a certain stretch of highway, or how to eat the chicken at a dinner party, the actions of those around us will be important in defining the answer".<sup>35</sup>

Aping the actions of others remains an effective logical shortcut – or heuristic – for individuals in navigating the complex world around us. Crossing the road when everyone else does in Japan is quicker and safer than trying to translate a crossing sign. Collectively, such approaches are also logical – as English philosopher and mathematician Alfred North Whitehead observed over a century ago: "Civilisation advances by extending the number of operations we can perform without thinking about them".<sup>36</sup>

Our instinctive desire for 'social proof' can generate unexpected consequences. Signs in Arizona's Petrified Forest National Park which cautioned visitors that the park suffered 14 tons of theft a year; one small piece at a time actually increased the pilfering, as people are prone to behaving as everyone does, rather than follow an abstract rule against it.<sup>37</sup>

Group think<sup>38</sup> is also exploited by advertisers who persuade us to buy their wares merely by making them seem popular, rather than pretending they are good (books are always 'best sellers'). Falling for such ploys means our decision making is being driven by ancient evolutionary pressures, rather than any rational analysis of the merits of the item.

These phenomena are not intrinsically bad. Humans are successful because our intelligence allows us to

30. Behavioral Economics, n.d.

31. Cherry, 2020

32. Hanson, 2019

33. Croutear, 2021

34. Moscovici and Zavalloni, 1969

35. Cialdini, 1984

36. Whitehead, 1911

37. Keim, 2017

38. Groupthink occurs when a group of individuals reaches a consensus without critical reasoning or evaluation of the consequences or alternatives due to their common desire to maintain collective harmony. This process stifles creativity and individuality to avoid conflict.

be social, as much as individual intelligence itself. Human societies of tens of millions – or billions in this globalised age – can accomplish absurd feats,<sup>39</sup> when any single individual dropped in the wilderness would still starve or freeze within a week.<sup>40</sup> This evolutionary reality demands that group dynamics should be tuned to improve outcomes, rather than suppressed or ignored.

## THE NEUROSCIENCE OF BAD DECISIONS

Bargain bins overflow with books dissecting the organisational and social factors behind decision making, but increasing attention is being paid to more fundamental factors such as neurological processing in the brain itself. The unconscious calculations we make when allocating value to alternatives and then deciding between them is the foundation of all decision making, good and bad.

Traditional economic theory assumes people consciously and rationally attribute a pseudo numerical value to alternatives and logically rank and act on their preferences. This presumption simplifies the drawing of graphs and diagrams but tends to break down in reality. The recent award of the Nobel Prize for Economics to researchers who analysed human behaviour in real-life situations<sup>41</sup> shows the importance of understanding value allocation and choice making in action.<sup>42</sup>

As Angela Yu,<sup>43</sup> a theoretical neuroscientist at the University of California, San Diego, explains, “Knowing something about how information is represented in the brain and the computational principle of the brain helps you understand why people make decisions how they do”.<sup>44</sup>

In one recent experiment, Paul Glimcher, a neuroscientist at New York University, asked people to choose between different chocolate bars,<sup>45</sup> including their pre-stated favourite. When faced with a choice of three, people would always choose the one they said they preferred, as economic theory assumes they will. However, if that choice was extended to twenty different bars, then many participants picked a different candy, even though they retained their original preference in their minds. When faced with a plethora of choices, it seems people often choose options they know to be suboptimal – and decision makers face a plethora of choices all the time.

Glimcher is combining research results from both brain imaging and behavioural studies to generate a neural theory explaining why such decisions are made. These and other approaches are quickly accumulating to create a new field of “**neuroeconomics**”.

A recent paper<sup>46</sup> by Glimcher, Kenway Louie and Ryan Webb argues their neural hypothesis works better than standard economic theory to explain the decisions people make when faced with a multiplicity of options. They argue the human brain evolved to take short cuts in decision making to reduce the amount of energy required, as the brain already uses 20% of an individual's energy despite comprising only 2–3% of body mass.

Just as our visual system tunes out expected information to concentrate on unexpected changes – allowing us to spot movement or a rogue speck with ease – Glimcher argues that brain neurons code information as efficiently as possible in a

39. Dunn and Taber, 2021

40. Discovery, n.d.

41. Jaeger, 2021

42. Singer, 2016

43. Yu, n.d.

44. Valdez, 2020

45. Neuroeconomics Lab, n.d.

46. Webb, Glimcher and Louie, 2019

similar way. Building on the concept of divisive normalisation developed in the 1960s,<sup>47</sup> he argues that neurons have evolved to send more efficient messages by encoding relative differences in choices, rather than absolute values.

Glimcher has since analysed the electrical activity in monkeys' brains as they decide between different food options and shown their decision-making neurons fire as his theory predicts – increasing or decreasing their rate of fire as the relative value of a particular food increases or decreases as alternatives are removed or added to the selection.

Just as our eyes are overwhelmed by a low sun, so the abundance of choice in the modern world may overwhelm a biological system which evolved to make simpler decisions – fight or flight or eat or not eat – in the natural world. Glimcher and his collaborators are therefore examining whether these basic brain algorithms can predict human error in more complex scenarios.

Such studies are at an early stage, and much remains to be discovered. Other researchers have identified spikes in neural activity during the allocation of value in areas of the brain beyond the parietal cortex examined by Glimcher, for example. Camillo Padoa-Schioppa, whose laboratory also investigates the cognitive and neuronal mechanisms underlying economic reasoning, notes that damage to the parietal cortex does not impair value-based choices, while impairments to the frontal lobe does. Angela Yu accepts that Glimcher's idea may explain simple choices but argues that innumerable other factors may affect more complex human decision making.

Despite their infancy, such theories may already offer clues for better practical decision making, such as eliminating as many bad choices as possible before choosing the best one. This reduction of options allows the brain to allocate relative value

to those that remain more effectively. Glimcher says that “rather than pick what I hope is the best, instead I now always start by eliminating the worst element from a choice set... I find that this really works, and it derives from our study of the math. Sometimes you learn something simple from the most complex stuff, and it really can improve your decision making”.<sup>48</sup>

Neuroscientists have also looked at the interaction of groups and the best ways to generate the sense of ‘**team flow**’ of when a group gets ‘in the zone’ to accomplish a task together.

Psychologist Mihály Csíkszentmihályi offered the concept of ‘flow’ over 30 years ago and explores the idea in his book (best-selling no doubt), *Flow: The Psychology of Optimal Experience*.<sup>49</sup> He argues that ‘flow’ – creative and productive engagement in a task – tends to emerge when people are challenged by a task, rather than overwhelmed or bored by it, and can offer it their full attention instead of being distracted.

Flow – akin to the sense of a sportsman feeling ‘in form’ – is more likely when individuals and groups have clear goals and can track their progress towards them, receive immediate feedback about their ideas, have control over their activities and feel immersed in the process to the extent of losing self-consciousness to become self-confident. Time in such states seems to pass differently, apparently standing still in the moment but seeming fleeting when recalled.

New research<sup>50</sup> published in the journal *eNeuro* offers empirical confirmation that this brain state exists, with participants in ‘flow’ sessions exhibiting a unique brain state associated with enhanced information integration and inter-brain synchrony quite distinct from that experienced during ordinary teamwork or solo activities.

47. Heeger, 1992

48. Singer, 2016

49. Csíkszentmihályi, 2008

50. Shehata et al., 2020

A group of researchers led by Mohammed Shehata<sup>51</sup> used electroencephalograms to measure the brain activity of teams while they played video games, for instance. He found team-mates reporting 'flow' generated increased beta and gamma brain waves in the middle temporal cortex, a type of brain activity linked to information processing. Teammates also had more synchronised brain activity during the team flow state. Shehata's researchers are now using the neural signature of team flow to monitor team performance and build more effective team structures.

## USING THE SECOND TRACK TO IMPROVE DECISION MAKING

Csikszentmihályi's concept focused on individuals, but rather than expect every team member to achieve that state for themselves, the **Second Track** encourages 'team flow' in line with Shehata's findings. The outstanding results of this approach over the last two decades suggest that freely collaborating groups of individuals with a range of expertise can achieve more than traditional first track groups considering the same problems.<sup>52</sup>

The Second Track facilitates harmonious groups of diverse individuals whose close relations and frank communication generates and implements practical solutions to clearly stated problems. Second Track groups have evolved to emphasise the 'five Cs' outlined by Csikszentmihályi – **clarity** of purpose, **concentrating** on a mutually interesting issue, **choosing** between options, **committing** to the team and **challenging** themselves to face complex situations. Analysis of the brain waves of people in such groups might offer a fertile new resource for researchers such as Shehata, Glimcher and Yu to analyse.

Other systems to improve decision making which have evolved over time may also have succeeded by tapping into the neurological and group processes sketched above, even if they were not aware of them.

Australia's Office of Best Practice Regulation,<sup>53</sup> an apolitical body nestled within the Department of Prime Minister and Cabinet, has outgrown its original mission of reducing red tape to scrutinise all kinds of proposals before they are put before cabinet. Its seven-stage filter, outlined in Figure 1, weeds out unnecessary, poorly thought out or self-defeating schemes before they are presented. This system reduces the alternatives considered by ministers to a manageable number, in line with Glimcher's approach of weeding out inferior alternatives to the best two or three which our brain's processing abilities have evolved to efficiently manage.

The Second Track process offers a similar approach by inviting participants to focus on a particular topic, generate a range of 'blue sky' solutions, reduce them to the best options and then work together to communicate and implement them.

This approach avoids the pitfalls outlined in the first part of this article, while tapping into the evolutionary and neurological insights outlined in the second to generate the 'team flow' required to produce creative ideas and pursue concrete applications.

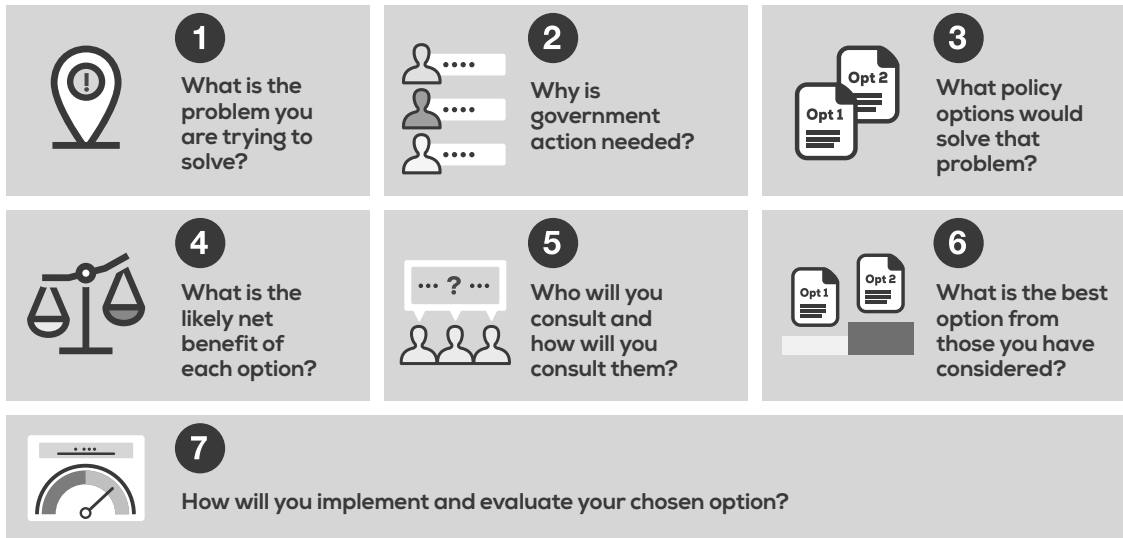
The Second Track may be even more effective than more highly resourced government bodies due to its broader range of participants. Poor decisions are often made because key factors are missed from the outset – rather than an illogical choice being made between fully researched alternatives

51. Shehata et al., 2020

52. Global Access Partners, 2022

53. The Office of Best Practice Regulation, 2022



**FIGURE 1: THE 7 REGULATION IMPACT STATEMENT QUESTIONS, OBPR 2022**

– and the Second Track allows participants to fully understand the situation they face from a wider range of perspectives before they generate and select solutions for it. A series of related issues can be symptoms of a more fundamental but unexamined problem, for example, which only consultations with a full range of stakeholders will bring to light.

Just as importantly, the Second Track offers a safe and constructive environment in which experts can discuss issues of mutual concern free from the responsibilities and risks which their assigned roles within different organisations can create. The elusive state of ‘team flow’ is encouraged in groups where all members are peers, no speech will be punished, and everyone has an equal say in decision making.

The Second Track allows people to contribute to the discussion without being constrained by an immutable agenda, or the fear of others rejecting them and their ideas. The initial session of a Second

Track group often resembles a ‘brainstorming’ session to push participants beyond everyday modes of thinking to produce more innovative ideas, while subsequent meetings prune these suggestions to a handful of choices, then select one or two to implement.

When the group has generated a broad selection of realistic alternatives, it then evaluates the feasibility, risks and implications of each one, with each member encouraged to offer input on potential pitfalls. This scrutiny echoes that of the government’s office in ensuring solutions are not only practical but directly address the stated problem at hand. The production of rigorous minutes helps create a structured approach to this scrutiny, as opposed to the free-flowing initial creation of ideas, allowing members to study the discussion afterwards, and assess threats, costs and ethical implications which can be raised at the next meeting.

Rather than require formal techniques, such as Decision Matrix<sup>54</sup> Analysis or Paired Comparison Analysis,<sup>55</sup> the decisions regarding which ideas to progress emerge organically from group discussions. The personal bonds created in the group, strengthened by their equal status, help to avoid the need for approaches such as the Delphi Technique<sup>56</sup> to reach a fair and impartial decision. Rather than reach decisions through a cycle of anonymous, written discussion and argument in which participants may not even meet, the Second Track emphasises the value of face-to-face communication, just as our ancient ancestors did and Pacific Islanders still do.

Regular interpersonal interactions, both in and around Second Track meetings, also eases the process of evaluating plans before they are actioned. There is no loyalty to traditional approaches or rejection of outside ideas because each Second Track group is a newly created entity. Members are encouraged to offer insights from their own experience to check the proposals of others, as well as suggest their own. Members cannot cherry-pick only the data which suits them, as other participants come from different organisations and fields, and so confirmation bias is much less likely to creep in than with long-standing groups established in existing organisations.

Second Track groups also differ from other think tanks and inquiries by encouraging members to implement as well as extol their ideas – in contrast to other groups which merely generate paper proposals or a range of generic ‘apple pie’ platitudes to mollify all participants. This also avoids the problems of prevarication, or paralysis by analysis, outlined at the start of this article, and forces participants to choose the best solutions their discussions have produced.

Such groups tend to have around five to seven people in the final decision-making group for each project, an ideal ‘family’ which balances workloads while offering individuals direct influence which encourages their further involvement.

Once decisions on the best recommendations have been made, the members of Second Track groups are in an ideal position to communicate them to decision makers in government and the corporate world, as well as act themselves. Coming from an independent group, they will not be seen as representing any particular vested interest or political party, encouraging an appraisal of the ideas on their merits.

## CONCLUSION

While human brain functions share the same fundamental processes, individuals themselves are incredibly diverse in their interests, expertise and views about the world. Indeed, the diversity and equality of participants in multidisciplinary Second Track groups is perhaps their greatest strength.

Politicians, public officials or interest groups inevitably have a similarity of experience and outlook which limits the breadth of their discussions and therefore constrains the decisions they make. Such monocultures cannot consider every angle or push the boundaries to find more innovative solutions and so always risk being stale.

In contrast, the Second Track embraces diversity of opinion, which in turn encourages initiative, innovation and collaboration. Each taskforce comprises experts from different walks of life, offering a wider range of inspiration and knowledge to draw from.

54. ASQ, n.d.

55. CIToolkit, n.d.

56. Twin, 2021

Far from slowing down the deliberation process, Second Track groups move more quickly than traditional groups, often holding only three to four meetings rather than dozens to achieve their goals. Indeed, independent research shows<sup>57</sup> that teams with diverse approaches make their decisions up to 60% faster than monocultures. Despite participants offering their services without financial remuneration, the collaborative nature of the groups increases retention, as people who feel their contributions are meaningful are far more likely to relish their work.

The Second Track's flat hierarchy and culture of acceptance and creativity minimises many of the individual and organisational factors behind poor decision making, while new insights from neuroscience will inform its evolution to optimise group interaction and improve decision making in government, business and beyond.

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57. Chignell, 2018

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# JOURNAL OF BEHAVIOURAL ECONOMICS AND SOCIAL SYSTEMS

Volume 4, Number 1, 2022

