HM Government

Understanding the Behavioural Drivers of Organisational Decision-Making

Executive Summary

March 2016

Acknowledgements

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Policy context

The Government has set out a desire to cut red tape for business, and a 'one in, two out' rule for business regulations forms an explicit part of the Department of Business, Innovation and Skills (BIS) policy. The prospect of less reliance on regulation and legal levers requires governmental departments and agencies to influence the behaviours of organisations via other means[1]. A need has been identified to understand the generalisable/common behavioural factors which explain organisational behaviours and influence organisational decision-making and change and, in particular, those influences that do not centre on fiscal incentives or penalties, or direct means of regulation such as inspections or reporting requirements.

Methods and approach

This rapid evidence assessment (REA) which was undertaken by the Institute for Employment Studies has been produced in response to an identified need to address the following overarching research questions:

- What does the existing evidence tell us about the behavioural factors which explain organisational behaviours and influence organisational decision-making?
- Are any of these insights (i) generalisable across multiple organisation types, and (ii) utilisable by those seeking to influence organisations' behaviours and/or decision-making?

A rigorous methodological approach to this review consistent with a standard government social research (GSR) rapid evidence assessment (REA) was devised to meet the challenge of identifying high-quality (peer-reviewed) sources containing evidence that were both (i) relevant to the main research questions and (ii) acceptably generalisable to multiple policy areas. The methodology was developed in an iterative nature to enable the research team to 'drill down' to the evidence considered central to the key questions for the research.

The findings of the review centre on a range of behavioural factors identified in the domains of behavioural economics, social and organisational psychology, management sciences and others. Many of the insights which emerge from the review stem from the consensus that groups (comprising more than one person) rather that single individuals represent the basic unit of decision-making in most organisations. A comprehensive summary of additional insights is reported thematically, starting with structural factors that provide context for the behavioural findings. This is followed by a detailed breakdown of behavioural drivers presented as 'cognitive', 'social' and 'cultural' factors. It should be noted that a thorough

[1] https://www.gov.uk/government/policies/reducing-the-impact-of-regulation-on-business

examination of structural factors and their relative importance falls outside the scope of the current review. However, the diversity of organisations and the environments in which they operate merit consideration, and the inclusion of a summary of structural issues in this report underlines the general point that a 'one size fits all' approach to influencing organisations would be over-simplistic.

Findings of the REA

Structural factors

As one might expect, the relative importance of behavioural drivers will vary according to organisational factors such as such as size, sector and 'raison d'etre' (eg whether profit making, representing an electorate). Other key considerations are ownership/governance and market share of the organisation and its concern for reputation based on degree of visibility to the public.

A particularly important structural factor is firm size. For example, with respect to motivations to comply with regulation, smaller businesses have been shown to place relatively more importance on economic drivers (ie direct cost advantages of complying) than larger firms. Generalisations based on size can, however, be over simplistic, particularly for small and medium-sized enterprises (SMEs) where significant differences can exist between businesses employing 250 people and those which employ five.

The shape of an organisation (eg layers of hierarchy; horizontal, vertical or flat structure) is important in understanding the way decisions are made and therefore how to influence behaviour change. For example, centralised, hierarchical decision-making can serve to filter out erroneous ideas at the expense of rejecting other, potentially more creative, solutions. Also, the extent to which an organisation is coordinated is likely to impact on whether a change implemented in one part of an organisation impacts the organisation as a whole more widely.

Intersectoral differences with respect to main business activity (ie differences between organisations operating in different business sectors) are also important, as is the distinction between private and public sector. As might be expected, the prospect of a competitive advantage is a motivating factor for businesses operating in the private sector. Behavioural drivers specific to public sector organisations have received comparatively little attention in the domains of study considered by this REA but there is evidence that, in common with private sector organisations, budget maximisation is often desirable, as is the drive to innovate.

Organisations will factor the reactions of stakeholders into many aspects of their decision-making; for example, those of shareholders (private sector) and the electorate (public sector). In the public sector, low public acceptability can quickly undermine commitment to take action. In the corporate world a shift towards increased transparency and disclosure of interests served is seen as influential in firm-level decision-making.

Economically important decisions with far-reaching consequences tend to be taken by teams rather than by individuals; this means in practice that the unit of decision-making in an organisation is a group, although this may vary according to context. For example, as a consequence of their size and resource limitations, SMEs tend to rely more on the abilities of their managers; this may have implications for decision-making quality (see below). There is a suggestion that boards, where they exist, may have a more influential role in smaller businesses than in corporations.

It may be appropriate in some circumstances to target points of contact other than senior managers or directors. Because of the way many organisations are structured, middle and junior managers can be key to enabling change and can become barriers to success if excluded. Timing is another structural factor to consider when influencing organisations. If an organisation has a business plan, or delivery deadlines that cannot be disrupted, its decision-makers may be more or less receptive to external nudges at certain times.

Cognitive drivers

In general, organisations are better at slower, more rational thinking than individuals because of the procedures that are put in place before decisions are taken. Recent, high-quality sources of evidence on non-interactive decision-making indicate that groups are more cognitively sophisticated than individuals and that, on the whole, group decision-making tends to alleviate the biases exhibited by individuals. Experimental results suggest that using teams in organisational tasks can subsequently improve the skills of employees in individual tasks; ie there are strong positive spillovers on the quality of individual decisions. (A potential implication is that following teamwork individuals are more difficult to 'nudge'.) Groups also have the potential advantage of access to a larger pool of knowledge than individuals.

However, as is the case with independent decision-makers, those in organisations have to work within three unavoidable constraints: information limitations, limited mental capacity and time. This means organisations may be content to rely on simple rules of thumb rather than on explicit calculation of complex optimal strategies. Therefore organisations are not immune from 'cognitive minefields', and reliance on 'MINDSPACE-like' drivers can apply in some circumstances. The influence of 'messenger', 'incentive', 'saliency', 'priming' and 'affect' can result in departures from 'rational' behaviour as can mis-estimation of risk. Studies addressing social and cultural factors identify other elements in common such as 'ego' and 'norms'. Experimentally it has been shown that cognitive biases known from individuals also work on groups but that 'situational and procedural contexts' dictate when this occurs.

Senior managers in particular can be prone to self-serving reinterpretations of reality and may, for example, underestimate the strength of their competitors. At the same time, recent evidence from influential papers in the experimental literature suggests that being responsible for others makes people more reluctant to take risks (ie demonstrating risk aversion), although having the opportunity to explain actions can attenuate this bias. An apparent disparity in some of the findings about leaders highlights the importance of considering contextual factors (such as the relationship between firm ownership and leadership) in particular organisations.

The position in the lifecycle of a business may make a difference in how 'nudgable' an organisation is. There is evidence that entrepreneurs in particular are prone to be influenced by availability, representativeness and anchoring when evaluating business opportunities and that they often rely on hunch and intuition. This needs to be balanced with evidence suggesting that SMEs are more risk averse than larger businesses (because of limitations in their ability to process and analyse information objectively). The relationship between business size and risk perception, or tendency towards any other cognitive bias is not a simple one and available evidence does not allow this to be determined with certainty.

Social drivers

A distinction can be made between taskwork (the skills involved in the execution of a task) and teamwork (the social processes that regulate interaction among group members. Social interactions therefore play an important role in the functionality of a team independent of the collective skillsbase of the group.

Competition is an important driver of behaviour for groups. Intergroup relations are significantly more competitive and less cooperative than interpersonal relations. Compared with decision-making as individuals, laboratory results showed that people trust less and reciprocate less as group representatives. Organisations are likely to operate strategically in relation to one another; the extent to which groups of decision-makers do so is determined by the extent to which they expect their competitors to behave strategically. This ties in with the finding that peer influence can occur between, as well as within, organisations: the prevailing local business climate can have a powerful influence on a firm's (mis)behaviour.

In seeking advice from others, organisational decision-makers give more weight to advisors who they see as similar to themselves. However, the best predictor of an advisor's influence is the level of confidence attributed to them. Advisors who have been correct in the past or who have more information at their disposal are given more weight than advisors with less accurate records. A possible implication of the above finding is that when in-house advice is poor, autonomous decision-making by individuals in organisations may offer advantages. This situation possibly also presents an opportunity for an external 'nudge' to have a positive influence.

In a real-world context, different agents may be pursuing their own personal interests rather than the organisation's interests. The resulting conflicts of interests often come at the expense of organisational efficiency. Agents with vested interests in the status quo may have an incentive to block change, even when this would benefit the organisation as a whole. Groups perform best when led by those who are cooperatively inclined. This finding is taken to suggest that groups may perform better when led by individuals who are willing to sacrifice personal benefit for the greater good.

'Groupthink' is a noteworthy phenomenon that runs counter to theories predicting superior decision-making in groups compared with individuals. This is associated with the scenario of a highly cohesive group being led by a strong leader who is pursuing a course of action that is clearly unethical or simply failing. An apparent contradiction between the hypothesised negative effects of groupthink and the attenuation of incorrect cognitive biases demonstrated in group experiments is not addressed directly in the literature identified for the present review.

Status (especially when status cues are salient) may cause individuals to adopt different, ie lower, standards of behaviour. This suggests that in the absence of penalties, high status can drive unethical behaviour. There is some evidence, however, that fairness is an important driver: experimental work indicates that it can be a central anchor for managerial decisions in ethical-dilemma situations.

Cultural drivers

From an evolutionary perspective, structured organisations have come into being because achieving ‘spontaneous consensus’ is not possible with large groups, and conducting a series of ‘palavers and negotiations’ is too time-consuming. Hierarchically governed groups are able to make decisions faster and more coherently than disorganised collections of individuals. Within coordinated groups, social norms and reciprocity form important functions such as preventing deviant behaviour which could ultimately be harmful to the group as a whole. Explanations at this level highlight the key role of within-group norms in driving organisational behaviours. This viewpoint also suggests that, compared with individuals, organisations in general will be difficult to ‘nudge’, particularly those where behavioural norms are highly entrenched.

Studies of corporate culture stress the importance of ‘shared norms, values and a common vision’ and there is a high premium for firms that are able to induce non-self-interested internal cooperation. The most effective tool to bring this about is the formation of corporate identity; this in part explains the power of very large organisations and the potential challenges associated with ‘nudging’ them.

In shaping the organisational culture and the ethical climate prevailing in a corporation, ethical leadership and the ’tone of the top’ are said to be the most powerful factors. A change of heart (or mind) at chief executive or board level is therefore likely to have repercussions across the whole organisation. Ethical decision-making is not solely driven by moral concerns: other important drivers can be consumer pressure and public perceptions (eg bowing to social pressure to avoid reputational backlash. Legacy may be another significant motivator for ethically responsible behaviour. In influencing organisations to behave more ethically, two kinds of drivers have been identified (and can potentially be tapped into): those that are more sentimental and ‘feelings-based’ or those that are more utilitarian or ‘rational’.

Managers are perceived as having their own styles which can determine the nature of their investment, financing and other strategic decisions. Demographic factors may be relevant, such as age and education; older managers may be less prone to risk-taking and have a less aggressive approach more generally. In family firms the influence of the founder on the decision-making processes and on the firm’s culture and strategic vision is often highly significant.

There is a small amount of evidence indicating that the gender composition of a team influences the process (although not necessarily the outcome) of decision-making. There is some evidence that women encourage participation by soliciting input from others, and sharing power and information. It is also apparent from the literature that the generalisable principles guiding management decisions need to be slightly adapted when different cultural backgrounds are involved. Value systems which guide decision making decision-making may differ from one culture to another: for example, the meaning of concepts such as 'right', 'wrong' or 'justice' may differ. Concerns have been raised that behavioural economics research has tended to ignore the role of cultural differences in financial and economic decision-making.

What evidence exists which tell us about the underlying drivers behind organisational decision-making?

In regard to this topic, a diverse and extensive evidence base across a number of disciplines exists, only a proportion of which, for pragmatic reasons, could be included in the current review. The behavioural economics literature provides a rich source of data as do sources originating within social psychology, organisational psychology and management sciences. To an extent these sources fill an apparent gap in the modern 'nudge'-type literature, ie recent models of behaviour produced for the purpose of understanding and influencing behaviours are principally oriented towards individuals making decisions for themselves (and possibly their households). In some respects, however, the evidence lacks cohesion, in particular there is a disjoint between the numerous laboratory studies which study group behaviour (designed to be context free) and observational studies of organisations which focus on contextual or 'real-world' factors.

How robust is this literature?

The REA methodology was designed with the broad aim of identifying and retaining sources of evidence considered robust and rejecting those that were not. However, inevitable difficulties arise when determining a coherent and consistent set of conclusions from a multidisciplinary evidence base where different definitions of robustness may be present. Generally it can be assumed that with respect to the particular research question(s), the literature sources cited in the REA present robust findings. The extent to which the conclusions of this REA are robust – as with all reviews of this type – reflects the scope and depth of the review: further more in-depth reviews of particular areas or field testing would be required to ascertain this.

What are the insights from this literature?

The following principles are well-evidenced:

- Organisations are more cognitively sophisticated than individuals, and internal decision-making processes can mean they are often better at slower, more rational thinking than individuals.
- Organisations are more competitive and self-interested than individuals. Organisations acting as a group tend to show less trust in other groups than they would as individuals. Entrenched, cultural norms in established organisations may make them resistant to being 'nudged'. This may have implications for government in trying to influence group behaviour. For example, intermediary organisations may be better placed to do so on their behalf.
- However, the evidence base also suggests the nature of decision-making in organisations is highly context-dependent; ie to some degree, biases in thinking associated with individuals do influence organisational behaviour, especially when decisions are made autonomously by a leader or manager.
- The literature is also suggestive (although not directly) of the existence of a possible 'spectrum' of decision-making types across and within organisations, ranging from 'individual-like' to 'group-like' behaviour. Structural factors (such as organisation size, shape, sector and decision

topic) are likely to be important variables in predicting the conditions which do and do not give rise to particular biases and distortions.

- There is a possibility that decision-makers in particular situations (eg just as businesses start up) or in particular contexts (where fast decision-making is required) may be particularly susceptible to biases in thinking. It is also possible that 'windows' of opportunity exist to influence the behaviour of organisations depending on the timing of the intervention and the perceived credibility of the influencer.

As a result of the predominantly academic orientation of the reviewed literature, the drivers of organisational decision-making can be determined more clearly than *the means by which an external party could utilise these drivers* to exert influence. However, in providing a focussed summary of a diverse and complex mix of high-quality evidence sources, this report offers an informed and comprehensive summary to support policymakers in applying behavioural insights to their work with organisations.

Generalisability of insights by sector/size/type

The focus of the available academic literature meeting the criteria for this review appears to be strongly oriented towards behavioural drivers of profit-making organisations. Although the REA's search terms and sift strategies were developed with the aim of being inclusive of material that could be applied to the public sector, in practice the ability to do this was constrained by the nature of the literature reviewed: academic research that is ostensibly focussed on organisations in a generic sense tends – on examination – to be more applicable to profit-making entities. There is also a tendency for authors discussing organisations to assume the structures common to large companies are found in all environments. The evidence base selected for review also has very little to offer in the way of insight into business-to-business (B2B) influences.

Within this caveat the range of applicability is still likely to be broad. As a result of the exclusion criteria used for the academic documents included in this REA, there was a strong bias towards sources reporting generalisable insights. Many reported findings (particularly those conducted in an experimental setting) are intended by their respective authors to be applicable to all types of organisation; there is no reason, for example, why experimental lab studies examining small-group decision-making should not be relevant to groups of decision-makers working in the public sector or small businesses. However, caution should always be applied, as when applying all findings obtained in controlled environments to address real-world issues.

Optimal moments for working with organisations

There is a possibility that decision-makers in particular situations (such as a business startup) or in particular contexts (where fast decision-making is required) may be particularly susceptible to biases in thinking. There is also a possibility that 'windows' of opportunity exist to influence the behaviour of organisations depending on the timing of the intervention and the perceived credibility of the influencer.

The birth of a business represents a special case in the sense that entrepreneurs generally face considerable risks at the point of startup. It has been observed that 'plunge' decision-making can be required at this stage, which involves acting on intuition and hunch (ie 'fast thinking' as opposed to 'slow thinking'). This raises the possibility that this early stage in the life of a business may be a good time to introduce a ‘nudge’; this insight may be more pertinent to sectors where there is a lot of business startup activity, compared with those populated by mostly established firms.

Who to target for organisational change interventions

A key consideration is whether it is more or less effective to target specific individuals within an organisation or to treat the organisation as a collective group.

Our evidence suggests a change of heart (or mind) at chief executive or board level is likely to have repercussions across the whole organisation. However, an important aspect of organisations is that they are groups, so decisions are likely to be made by (as well as on behalf of) more than one person. Deputies, boards and middle management may be involved in, consulted on, or potentially lead decision-making, depending on the nature of the decision.

Knowledge of the structural aspects of targeted organisations (for example their size, shape and coordination setup) is important in making any judgement about who to target and how. Thinking beyond size and sector appears to be important: for example, organisational shape will have implications for the nature of internal communications and the influence of individuals in particular roles.