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Public and private sector nudgers can learn from each other

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Abstract: The application of behavioural insights to public policy has been a success story of recent years, in academia and in the civil service. Alongside this, a parallel group of practitioners has emerged, using the same underlying research to pursue commercial and marketing goals. Although the objectives are mostly different, many of the approaches are similar. This article contrasts public and private sector approaches and highlights lessons each group can learn from the other.

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Introduction

The Behavioural Insights Team (BIT) is a well-known success story in the application of behavioural science in policy. Its work, as outlined in this issue's article by Sanders, Snijders and Hallsworth (2018), clearly illustrates the value of this discipline when applied systematically to achieve social impact.

Behavioural theorists have long discussed the potential for marketing to use this science (Ho *et al.*, 2006; Cialdini, 2007) and alongside the rise of BIT in government, a thriving industry of private sector applications has grown up, especially in the UK (Berry, 2011; IPA, 2015). According to the global market research trade association, the UK has half of the world's behavioural economics and neuroscience research firms (ESOMAR, 2017). The firms and practitioners using these techniques often have marketing objectives, sometimes consulting or other organisational goals, and sometimes themselves wish to achieve social impact (e.g., where utilities work to reduce energy consumption by their customers) (Ayres *et al.*, 2013).

Public and private users of this research have much to learn from each other, and in this response I offer a private sector perspective on each of the challenges

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and opportunities identified by the BIT authors. I also find an extra challenge – and an extra opportunity – not mentioned by the authors. The public sector, in turn, might also experience these issues in the future.

Cluster 1: complications and challenges

Long-term effects

Many of the best-known private sector case studies in behavioural science are anecdotal ones, where a psychological interpretation has been retrofitted to an intervention that was carried out without conscious application of scientific knowledge. Examples include the De Beers 'anchoring' adverts for diamond engagement rings ("How can you make two months' salary last forever?"), an application of the price–quality heuristic to generate demand for black pearls (Ariely, 2008) and the common exploitation of hyperbolic discounting in buy-now-pay-later furniture purchase schemes and credit card usage. The effects of each of these examples persist to the present day, providing at least the suggestion that behavioural impacts can survive over the long term.

Most effects, of course, are smaller and less famous – and private sector actors face many of the same challenges in achieving long-term change as do those in the public sector. The incentives are often short term: although the stock market theoretically reflects long-term expected outcomes in share prices, most management incentives and metrics operate over a shorter scale. The responses of competitors present an additional challenge: an intervention that works will be copied, diluting its effect on the results of the originating company. Unrelated innovations within each marketplace also change the context in which an intervention is operating; a new app launch that makes a retail product obsolete will also, in passing, make any pricing or marketing techniques used to sell it also obsolete.

However, the private sector at least possesses a strong profit motive to continue any intervention that is working. Even in the presence of intrinsic biases in measurement or corporate decision-making, long-term data will eventually accumulate on the success of interventions.

Repeated exposure effects

The related risk of diminution by repeated exposure exists in the private sector, too, but with an additional twist. A successful tactic in the public sector will be copied by independent actors, potentially diluting its effect. In the private sector, the impact will be more than mere dilution: it will be copied by a firm's competitors, whose success imposes a direct cost on that firm. This introduces a partial equilibrium effect that would be expected to be stronger than the general equilibrium effect about which the BIT authors speculate.

In one sense at least, this kind of repeated exposure can result in higher effectiveness: the credibility of a technique may be reinforced when endorsed by multiple competing organisations. Multiple companies using an opt-out default for email marketing legitimise this approach as a commercial norm, potentially reducing consumer cynicism and resistance to it.

Finally, there can be interactions between public and private sector nudges – which in some cases could have opposing objectives. In this respect, the public sector can act like a competitor to a private company.

Proxy measures, spillovers and unintended consequences

The commercial world uses many proxy measures, and there is plenty of research to help understand their relationship to the true objective being sought (e.g., Hirschey & Wichern, 1984). Examples in marketing include the sales funnel, where companies aim to generate a certain number of sales enquiries, reasoning that this will lead to a predictable amount of revenue or profit; and advertising awareness and recall measures, which companies track on the assumption that remembering a TV ad is correlated with buying the product being advertised.

Other proxy measures are financial, where executives are rewarded for hitting revenue targets or market share goals, or disciplined for exceeding a departmental budget; or task based, where an individual's job is to deliver a specific piece of work, rather than attempt to optimise the profitability of the firm.

The use of proxy measures in business is related to a whole class of economic challenges known as principal-agent problems (Baker, 1992, Christen *et al.*, 2006). The agent (an executive) pursues their own interest (the proxy measure) rather than following the profit motive of the principal (their employer or its owners). Various mechanisms have been designed to try to combat this tendency (Ballwieser *et al.*, 2012). Some of these, such as independent assessment of the relationship between proxy and target, could help reduce the risk that proxies will make the measurement of success less accurate.

The spillover effects the authors discuss have much in common with this class of principal-agent problems. The example of fraud spillovers from a government voucher programme is typical: the principal's focus on a proxy measure (nutrition) and neglect of other objectives such as cost allowed agents to pursue their own private interest (profit). Private firms have historically used processes such as auditing to reduce agency problems (Watts &

Zimmerman, 1983); learning from this, careful incentive and mechanism design can help to reduce these risks.

True universals and cultural variation

Although commercial market research has measured multi-country differences in preferences and behaviours for many years (Steenkamp, 2001, Craig & Douglas, 2005), it appears to be less common for public sector behavioural research projects to span multiple countries: even a UN report on the subject (Shankar & Foster, 2016) relies mainly on separate experiments conducted in a series of individual nations. An exception is a World Bank report (World Bank, 2015) that cites several cross-country experiments in social change.

Many public sector interventions would face challenges in developing measures to compare behaviours across countries; for example, different tax and administrative systems might make it difficult to compare the impact of changes in reminder letters. By contrast, at least some products in the private sector – such as widely distributed beverage or electronics products – are very similar from one country to the next. One might expect it to be easier to make such comparisons.

Indeed, some recent behavioural research projects do compare results in different countries (Caldwell & Seear, 2016), and known differences in decision-making and cultural psychology inform the work of at least some practitioners (Halonen, 2015). Client organisations that span different countries are more prevalent in the private than the public sector, so they may continue to lead the way in understanding these differences.

Reverse impact

As in the public sphere, 'impact' can go both ways for commercial researchers. Practitioners do learn from published academic studies when designing interventions and tests for their clients. Occasionally, the results of a commercial intervention are written up for publication.

However, the pressure not to publish is greater in the private sector for a few reasons. The same data protection rules apply, but companies are more likely to be restricted by them than governments (Joint Information Systems Committee, 2017). Companies have a greater interest than do governments in keeping the details of successful interventions secret from their competitors. And while people in government can sometimes be prevailed upon to recognise the additional public good that comes from publication, this argument is less likely to persuade the private sector.

Conversely, there is public relations value to be gained by companies and especially by practitioner agencies (who want to sell their services to the next client) in promoting the success of behavioural research. To the extent that the theoretical predictions and methodology of an experiment can be described without revealing the results, some dissemination is likely. A number of conferences include summary case studies – though without the rigour of peer review, these will have less lasting impact on the wider discipline than published journal articles.

Replication crisis

If there are incentives to selectively publish research findings in academia and government, they surely exist in commerce, too. The same incentives that push agencies to publicise their experiments in order to win more business can also pressure the private sector to pick and choose the results they choose to promote.

These pressures can be magnified by the dynamics of client organisations. A person responsible for spending $300,000 of their employer's money on a behavioural science research project does not want to discover a null result. The research agency, being paid to keep the client happy, has no desire to produce one. With no pre-registration for commercial research, usually no external or peer review and short management attention spans, it would be natural if only the most impressive subset of findings were reported. With random variation in measured effect size, any survey measuring dozens of variables will find enough statistically significant results to make a good presentation to the CEO.

This phenomenon is not specific to behavioural research – all market research, including traditional survey or focus group research, runs the same risk. It is to be hoped that companies will monitor the results of interventions in the field and stop using those that are clearly not working. But all field measurements, as discussed above, are imperfect. And most companies lack feedback loops that might tell a researcher their result failed to replicate in the real world.

I endorse the BIT authors' call for humility, robustness and scepticism in designing and evaluating experiments. I cannot confidently say that the incentives that set spectacle against truth will diminish any time soon.

Other challenges

One additional challenge is sometimes experienced by private sector researchers and may well arise for public policy-makers, too: motivated evidence gathering.

More than once, the author of this response has been asked by a client to carry out research 'to prove' some claim or other. Most clients genuinely

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want to know the answer to their research question, but a few are just looking for evidence to support an assertion that they would like to be true. In one case, a (notorious) newspaper conglomerate wanted to conduct psychological research to demonstrate that readers would have a more favourable impression of companies who advertised in its pages. One of its newspapers had recently featured on its front page a highly misleading political interpretation of a survey, so it was not hard to infer a pattern. Briefs like this are easy to turn down when other clients are waiting in the wings, but in tougher economic times the temptation might be greater. It is easy to imagine public policy researchers being asked to generate 'policy-based evidence' in a similar way.

A second challenge is the risk that segments of the public begin to reject behavioural interventions on principle. Despite early arguments that nudging is more libertarian than traditional regulation (Camerer *et al.*, 2003, Thaler & Sunstein, 2003), many commentators do not agree. Some suggest that the invisibility of nudges is anti-democratic and that explicit law-making forces policy-makers to debate their choices in public (Farrell & Shalizi, 2012). Whatever the merits of this argument, it is certainly possible to imagine a backlash. In the private sector, companies often report a desire not to 'manipulate' their customers – or at least not to be *seen* to manipulate them – and firms cannot even rely on the policy-maker's defence that they are acting in the consumer's own interest. Government and private nudgers might be well served by working together in order to listen to, and address, public concern on this question.

Cluster 2: opportunities

Broadly, private sector opportunities have less overlap with government opportunities than do the challenges. However, there are some lessons in all five areas mentioned by the BIT authors.

Behavioural government

By definition, this concept does not precisely exist in the private sector, but a rough equivalent is behavioural management theory – which has been studied widely (Bazerman & Moore, 2008). The field of industrial and organisational psychology has insights here that are often used in the private sector. Many practitioners in this field do not carry out experiments, but apply lessons from prior research – behavioural government specialists might also take this approach, or they may choose the more expensive but more accurate route of running their own experiments to find out what works.

Many organisational practitioners do not have the expertise to evaluate their work in experiments (Church, 2017), but some are running corporate

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experiments based on behavioural research (Smets & Thoresen, 2017), and many of the same management phenomena that the BIT authors have seen in government can also be observed there.

BIT's future work on this topic is eagerly anticipated and there is no doubt that private practitioners will have lots to learn from it.

Scaling interventions

One might expect private sector interventions to scale more naturally than public sector interventions – once a profit-making opportunity is discovered, companies would surely roll it out as far and fast as possible. However, bringing about change within private sector organisations presents some of the same behavioural dilemmas as the public sector. Individuals often prefer established routine, do not want to take risks, may trust their own experience more than scientific evidence or may simply be isolated from information about the change. Market research departments, the home of many corporate behavioural experiments, typically have limited power within organisations (Moorman *et al*., 1992) and can rarely mandate change.

Occasionally, an intervention garners attention outside of its host organisation, at which point the desire for competitive advantage may help it spread. Many notable examples exist (Shenkar, 2010), but corporate culture often values innovation and is focused on the firm's own strategies; copying others can be a low priority. Therefore, scaling remains as big an opportunity for companies as for governments.

Social diffusion

Peer-to-peer marketing is an established discipline in the private sector, and although it is often practised unscientifically, it may have lessons for behavioural public policy-makers.

One route that is often followed is to cultivate a social media community who may transmit interventions to one another and to their peers. Another is to identify and promote to 'influencers', individuals who are thought to be well connected within peer networks and whose behaviours have an outsized impact on a broader population (Brown & Hayes, 2008).

However, while citizens may be motivated to pass on messages with a positive social impact to their peers, they are less likely to have an intrinsic motivation to disseminate commercial messages. This has led to the development of many digital 'hooks' to encourage individuals to pass on messages. These could be used to increase the motivation to socially diffuse interventions in the public sector, too.

Social networks are not homogeneous: people partition into groups by political affiliation, interests, religion and other variables. This may limit the utility of social diffusion as a strategy for behaviour change. If a healthy eating nudge is socially disseminated at, say, school gates in a middle-class neighbourhood, it may never reach important groups. Integrating social influence strategies with the private sector's expertise on audience segmentation may increase their success.

Nudging organisations

In private sector work, companies are usually the originators of nudges instead of their targets. Although many companies do sell to other firms, whom they would presumably like to influence, most research work has been done on consumer behaviour.

Government has an important and legitimate interest in regulating organisational behaviour, while private sector firms have no equivalent reason or standing to regulate each other.

Private firms, conceivably, may find themselves exploring ways to *resist* behavioural interventions aimed at their employees. It is possible to imagine that a financially focused board of directors might regard the social consciences of their employees as an inconvenience. At the extreme, this area might end up being another front in a behavioural 'war' between government and business.

Thorny problems

Businesses have often thrived by focusing their attention on simpler problems (identifying a homogeneous audience with similar problems and selling more products and services to them) and avoiding the complex ones. Governments do not have the option of ignoring hard tasks. There may therefore be less for the public sector to borrow from the private sector in this domain.

Economists might argue that the biggest thorny problem of all – how to distribute resources across society – is tackled by the quintessential private sector institution: the market (Hayek, 1945). Understanding the behavioural substrate on which markets operate – trust and honesty tempered with caveat emptor, relatively consistent and stable prices, long-term contracts and so on – could help inform approaches to some thorny problems that are not traditionally seen as being in the market domain.

Other opportunities

A major opportunity for the private sector is to use behavioural and psychological insights as part of the process of inventing new products and services.

A better understanding of the nature and structure of consumer preferences and how people use products to satisfy them is available through behavioural research. Companies can use these insights for much more than just selling their existing products: learning how to better satisfy people's needs is the route to a more transformative use of behavioural research in the private sector.

Government, too, could apply these insights to design altogether new public services. Where the solution to a need has positive externalities or the group who would benefit has little wealth, government is more likely to innovate than the private sector. A comprehensive understanding of what citizens really want and need (and the subtle distinction between those two terms) can make sure government continues to serve its society better, maintain and develop its relevance for all people and increase the sum of human happiness.

A final opportunity for both sectors is the continuing development of a solid theoretical base behind the interventions that we design. A number of frameworks have been applied in BIT's own work, such as MINDSPACE and EAST (BIT, 2014). Commercial interventions have used these and other frameworks, which are often designed as taxonomies of either psychological phenomena or types of intervention. There has been less work on unifying theoretical frameworks. Some (Thaler, 2013) say this kind of work is not important or even possible, but in the commercial sector, major growth in applications may not be achieved until it happens. In order for a thriving engineering discipline to emerge in industry, a set of physical laws and rules had to be developed, as well as the set of practices and tools that make their application easy. Behavioural 'engineering' has the practices and tools, but not the laws or rules. It is usually seen as the remit of a third sector – academia – to produce those. Perhaps this time the public and private sectors can help.

Conclusions

Businesses applying behavioural science to influence their customers' decisions face many of the same challenges as governments and other public bodies. Practitioners in each sector can learn much from the other.

Both government and business have bought into the narrative of rational economics, albeit a narrative that is adhered to more in theory than practice. Both have started to recognise the predictive accuracy and practical effectiveness of behavioural science. They share institutional structures and a group of 'consumers' whose decision processes do not distinguish between public and private service providers.

There are differences, too: the public sector traditionally mandates, while the private sector sells; government represents the people, while companies are agents for their shareholders. These differences can be meaningful for decision-making – they influence intrinsic motivation, trust and the kinds of levers that are available to the policy-maker. In addition, companies and government may oppose each other across some tables: firms need to take into account the legitimate objectives of governments in regulating them.

Our field is maturing, and most of the challenges discussed here are a natural consequence of that growth. There is little to fear here; simply a new phase of discovery and application to prepare for.

As a discipline, applied behavioural scientists will continue to benefit from sharing expertise, building a public commons out of the data, stories and theories of success and failure. Many of us as individuals work with clients or employers in both government and business, and the published work of the academic sector is drawn upon by both. BIT and its work provides a unique and valuable intellectual resource. As public and private practitioners build upon it, that work will create a positive impact far beyond the projects BIT itself carries out.

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