



## Encouraging Innovation in Public Sector Employees: The Role of Financial Incentives on Creative Tasks?

Joe Gladstone

Innovation in the public sector is no longer a luxury. Change has now become the rule, rather than the exception, as new global challenges mean innovative and creative solutions are required from government employees as never before. This task is made both more urgent and more difficult as budget cuts continue to bite. What are the primary levers available to encourage innovative ideas and behaviour from public sector employees? This paper looks at current evidence from behavioural science to better understand the problem and argues that classic assumptions of reward do not apply when trying to encourage more complex and creative behaviours.

### You want Innovation? Just pay workers more.

The public sector is often criticised for its slow pace of innovation and change [1]. This is despite a widespread and growing range of innovative programmes across public sector organisations globally. The problem is that such innovation is almost exclusively the preserve of senior decision-makers, specialist 'innovation units' or expensive external consultants. How do we encourage innovative and creative behaviours at the level of the employee and the team?

Popular management books are filled with examples of providing financial incentives – from bonuses, competitions and prizes - to reward employees for innovative ideas and behaviours. Such incentives are often regarded as good value, as ideas from employees are a major source of value creation in firms. Prizes for innovative ideas, such as GE's Ecomagination Challenge, attract tens of thousands of participants and similar practices have attracted much attention in the public sector. For example, high profile successes in the US and elsewhere show the value of 'gain-sharing', where public sector employees take home a portion of the savings they generate for the organisation. And bonuses and differential pay structures have long been argued to be useful to attract the 'stars' who will steer innovative change in the public sector [2].

These ideas are inspired by standard economic principles, which argue that to encourage a specific behaviour it must be compensated adequately through reward, with higher rewards resulting in more of the desired behaviour. This principle is also argued to be true for cognitively demanding, creative tasks, as thinking is always a costly activity and must therefore be compensated in the same way [3].

### When Rewards Reduce Creativity

Psychologists, on the other hand, argue that creativity is primarily encouraged through intrinsic motivation and monetary incentives may in fact displace the intrinsic pleasure derived from engaging in an activity. This is supported by a large and growing stream of literature finding that financial incentives have a negative impact on creativity and innovation. For example, in a set of field experiments in rural India, participants completed tasks requiring a wide range of abilities: creativity, attention, concentration, and memory. They were randomly informed that exceptional performance would be rewarded by a small, medium, or large financial bonus (equivalent to a day, two weeks, or five months' salary respectively). In contrast to the economics-based approach, those in the medium bonus condition performed no better than participants in the small bonus condition, while participants in the large bonus condition performed worst of all [4]. These surprising findings were replicated using functional magnetic resonance imaging (fMRI) to monitor participants' brain activity, where it was found that the prospect of obtaining larger-than-average rewards engaged a relatively larger share of attention and working memory, leaving little available to carry out tasks creatively or effectively [5].

Of course, these studies are set against a vast economics literature demonstrating the value of financial incentives. However, their conclusions are far from unique. A recent meta-analysis reviewed 46 laboratory and field experiments on pay-for-performance and found clear negative relationships between tangible rewards and performance on some tasks. It seems that for more interesting and creative tasks (such as solving mathematical problems) financial rewards have a negative impact on performance, while for simple non-creative tasks (such as installing automobile windows), financial rewards have a positive effect [6]. Experimental studies completed in the past year, which have yet to be published, show similarly that financial incentives have a neutral or negative influence on open-ended creative thinking [7, 8].

### Implications for Public Sector Managers

The findings outlined above are important because complex and creative tasks are an essential part of modern day-to-day public sector work, and so understanding what drives this behaviour is a crucial

tool for managers. A review on bonuses in the public sector commissioned in 2012 by the UK government demonstrates the difficult decisions in how best to motivate employees with financial means. The emerging evidence outlined here suggests that creating an environment where creativity can flourish requires us to reject many of the old assumptions about employee motivation through financial incentives. Therefore, to encourage creativity and greater innovation from the public sector workforce, managers must instead focus greater efforts on the many non-financial levers available to them. In her classic account, Professor Teresa Amabile of Harvard University suggests the most crucial factors are for employees to feel challenged, to have freedom, to have the resources to achieve the task, and supervisory encouragement [10]. A deeper understanding of the motivational forces acting upon employees is crucial to maximise the human capital potential of the public sector and to overcome the extraordinary challenges currently facing governments across the world.

## References

- [1] Windrum, Paul and Koch, Per. 2008. Innovation in the Public Sector Services: Entrepreneurship, Creativity and Management. Northampton Mass. Edward Elgar Publishing.
- [2] Flynn, Norman. 2007. Public Sector Management. 5th Edition. Financial Times/ Prentice-Hall.
- [3] Camerer, Colin & Hogarth, Robin. 1999. The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework. *Journal of Risk and Uncertainty*, 19, 7-42.
- [4] Ariely, Dan, Gneezy, Uri, Loewenstein, George and Mazar, Nina. 2009. Large Stakes and Big Mistakes. *Review of Economic Studies*, 76, 451-6.
- [5] Mobbs, Dean, Hassabis, Demis, Seymour, Ben, Marchant, Jennifer, Weiskopf, Nikolaus, Dolan, Raymond and Christopher, Frith. 2009. Choking on the money: Reward-based performance decrements are associated with midbrain activity. *Psychological Science*, 20, 955-962.
- [6] Weibel, Antoinette., Rost, Katja and Osterloh, Margit. 2010. Pay for Performance in the Public Sector: Benefits and (Hidden) Costs. *Journal of Public Administration and Research Theory*, 20, 387-412.
- [7] Eckartz, Katharina, Kirchkamp, Oliver and Schunk, Daniel. How Do Incentives Affect Creativity? (December 12, 2012). CESifo Working Paper Series No. 4049. Available at SSRN: <http://ssrn.com/abstract=2198760>.
- [8] Charness, Gary & Grieco, Daniela, 2013. Individual Creativity, Ex-ante Goals and Financial Incentives. University of California at Santa Barbara, Economics Working Paper Series qt4mr6p1d5, Department of Economics, UC Santa Barbara.
- [9] Bonuses in Public Sector Under Review. BBS News. 13th February 2012. <http://www.bbc.co.uk/news/uk-17008020>
- [10] Amabile, Teresa. 1998. How to kill creativity. *Harvard Business Review*, 76, 77-87.