Chapter 6.9
The Power of Incentives in Decision Making

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Most of economics can be summarised in four words: “People respond to incentives.” The rest is commentary.


INTRODUCTION

The organisation of the workplace is evolving. In many industries, mass production by large, vertically integrated, hierarchically organised firms is being replaced with more flexible forms of both internal organisation and industrial structure (Brynjolfsson & Mendelson, 1993). Work is increasingly accomplished through networks of smaller, more focused enterprises. Added value is generated by ever-changing coalitions, where each member of a coalition specialises in its area of core competence and controls it through the use of strategic partnerships.

The information systems (IS) revolution has had an enormous influence on how organisations are managed. Electronic access, communication, and decision support influence several managerial processes and systems including the nature and scope of managerial roles, organisational structure, strategic planning systems, budgeting, performance measurement and review, incentive compensation systems, and knowledge management.

In today’s world of business, investors must ask how they can motivate independent, self-interested, self-organising, somewhat-coordinated managers so they focus their skills on the common goal of maximising the value of the company. Meanwhile, managers must also inspire their employees to work hard, their suppliers to pro-
vide a good service at the right price, and their customers to purchase their products. Within companies, team structures are replacing the traditional hierarchical form and incentives are being used to encourage performance (Baker, 1992; Holmstrom, 1979).

What are incentives? Incentives are mechanisms offered to you to help in the decision-making process. In economics, an incentive is any factor that provides a motive for a particular course of action. Some incentives make people better off and reward them for their actions. Other incentives leave people worse off and penalize them for their actions. Economics is to a large extent a study of incentives: incentives to work hard, to produce high quality goods, to study, to invest, to save, and so forth (Laffont & Martimort, 2002).

The aim of this article is to examine how incentives assist in the managerial decision-making process at individual, group, and firm level. We argue that incentives are an integral component of a successful business. Suitably designed incentives provide a tool to elicit correct and timely information, to encourage and reward performance, and to promote coordination and cooperation between firm owners, managers, and employees. We begin by examining the source of the incentive problem and the associated principal-agent literature. We highlight the importance of incentives in solving hidden action and hidden knowledge problems in information security. We look at the concept of contract design and examine how contracts can be used to alleviate one of the problems associated with outsourcing the development of IS. We also look at how incentives can be designed to minimise information problems in auctions. Finally, we discuss the limitations of incentives and we conclude by outlining some avenues for future research.

**BACKGROUND**

Traditional economic theory concerned itself with understanding how prices are formed in competitive markets and failed to ask such questions as how owners of firms can motivate their employees to strive for the same goal—profit maximisation. In modern organisations, particularly those owned by a large number of shareholders, firm owners must relinquish some control of their firm and delegate tasks to their employees. As soon as one acknowledges that owners and employees have different objectives, delegation becomes problematic (see for example, Baker, 1992; Dav-enport & Prusak, 1998; Eisenhardt, 1989; Fama, 1980; Holmstrom, 1979, 1982; Gibbons, 1998; Milgrom & Roberts, 1992; Mirrlees, 1997; Pratt & Zeckhauser, 1985).

If the interests of the owners and employees are fully aligned, there is no incentive problem. The problem arises when there is conflict between the incentives of both parties and when there is less than perfect information (see for example Holmstrom, 1979, 1982; Mirrlees, 1997, Vickrey, 1961'). The following three examples demonstrate how differences in the incentives between the principal (the employer) and the agent (the employee) can arise: (1) An insurance company wants its salespeople to be looking for customers, but the salespeople might prefer to be shopping. (2) A new author, seeking fame, wants his/her book to be reasonably priced so as to achieve high sales and a larger readership, the publisher, seeking high profits prefers a higher price. (3) An IT subcontractor wants to pass any production-cost increases to the price contractor2 while the prime contractor wants the subcontractor to be responsible (as least in part) for any cost increases (McMillan, 1992). All of these examples have the same underlying structure. The person designing the terms of the contract, the principal, has one aim whereas the person performing the task, the agent, has a different aim (Pratt & Zeckhauser, 1985). In economics, this is known as the principal-agent problem.

The principal-agent problem refers to the difficulties that arise under conditions of incomplete and asymmetric information when a principal hires an agent (Eisenhardt, 1989). The hiring