Eliminating sales quotas may stimulate profits

FROM STANFORD GRADUATE SCHOOL OF BUSINESS

Eliminating sales quotas boosts company profits says Professor Harikesh Nair. In one case, the new sales compensation plan without quotas resulted in a 9% improvement in overall revenues, which translates to about $1 million of incremental revenues per month.

How do you pay your sales force in a way that motivates them to do the best job possible? The U.S. economy spends an estimated $800 billion annually compensating sales forces, almost three times the amount devoted to advertising, yet sales force compensation remains a troubling question.

Many firms offer bonuses for crossing certain sales thresholds, or meeting quotas. New research at Stanford Graduate School of Business, however, suggests that quotas may, in some situations, undercut profits. When one Fortune 500 company removed quotas, sales went up $1 million per month.

"The fundamental problem is that managers never know exactly how much time and effort their salespeople are putting into their work," says Harikesh Nair, an associate professor of marketing and one of the authors. "In the absence of such knowledge, they can only base payment on agents' output, not their input." Commissions, quotas, and bonuses based on performance are thus the typical staples of sales force compensation. Quotas, in particular, are believed to generate strong incentives by serving as targets or goals that encourage sales agents to work hard.

While commissions may spur effort in unequivocal ways, the quota carrot can sometimes result in agents gaming the system. "Those who have already made the quota in a current compensation cycle may have an incentive to postpone additional sales," says Nair. "Alternatively, those who perceive they have no chance of making the quota in the current cycle have a perverse incentive to postpone their effort to the next cycle."

In a recent paper, Nair and Sanjog Misra, an associate professor of marketing at the University of Rochester, develop finely specified mathematical models that describe the behavioral patterns of every sales agent employed by a Fortune 500 contact lens manufacturer. The mathematical models are based on a branch of economics named "agency theory," which specifies how output-based compensation schemes should be designed. The models enable them to simulate what sales would be if the features of the compensation contract were changed, and to quantify the cost to the firm of employees gaming the system.

They find that removing quotas enhances firm profit. In essence, eliminating quotas removes the inefficiency induced by gaming.

Nair and Misra then worked with company managers to formulate a new compensation scheme without the quota requirement. Implemented at the start of 2009, the new plan resulted in a 9% improvement in overall revenues, which translates to about $1 million of incremental revenues per month.

The new compensation plan also was extremely popular among the sales associates. "Most salespeople do not like quotas," says Nair.
Striking the quota system may not be the answer for every company, say the researchers. "What managers need to do is evaluate more carefully how the system is functioning for their own organization," Nair suggests. One approach is for firms to conduct mathematical analyses that formally consider the behavioral responses of sales people to aspects of the compensation scheme. Another, says Nair, is for managers simply to take a good look at their group's sales data over time to understand how output has varied when quotas or incentives changed. "That can give a company a good base by which to evaluate what can happen if they do change the compensation system," he notes.

The new study utilizes both approaches. The mathematical strategy used by Nair and Misra combines agency theory with a technique called "dynamic programming." Leveraging this framework in conjunction with the firm's historical sales data enables them to form a more complete picture of the efficacy of the compensation scheme. The study demonstrates that this type of approach can help significantly improve marketing decision making and firms' profitability.

"Firms now operate in an increasingly complex and data-rich environment. Those that understand how to harness the power of this data to cut through this complexity will enjoy a lasting competitive advantage," says Nair.

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