

## End-of-Quarter-Scrambling (EOQS): Aligning Sales Incentives or Power of Habit?

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### Structured Abstract

*“This is a devil that possesses us; it is three days of hell –every quarter”*

- Senior VP of Sales of a Fortune 100 Company

Over 10% of the U.S work force is employed in sales (Mishra and Nair 2010<sup>3</sup>). In 2006, the U.S economy spent \$800 billion on salesforce related expenses and typically 10-40% of sales revenue is spent on salesforce costs (Zoltners et al. 2008). Salesforce compensation often has multiple dimensions that may include a fixed salary. 89% of firms also use incentives such as commissions based on the sales quota as part of their sales compensation. These commission-based incentives are provided to the salesforce to meet or exceed their sales quotas. Thus, effective use of salesforce compensation has been of interest to researchers and managers for a long time.

Sales compensation plans have been designed to maximize firm profits by *aligning the salesperson’s incentives with those of the firm* (Farley 1964). Over 50 years of research in sales compensation has examined effectiveness and appropriateness of various sales compensation plans with the said objective (e.g., Coughlan and Sen 1989; Oyer 2000; Mantrala, Sinha, and Zoltners 1994; Basu, Srinivasan, and Staelin 1985; Mishra and Nair 2010). This stream of research takes an agency theory perspective. Accordingly, the salesforce is compensated with a variable compensation, such as bonuses and commissions to offset the *hidden information* and *hidden action* problems associated with salesperson behavior.

This stream of research has contributed extensively towards improving our understanding of salesforce compensation. Yet, more recent research on the firm’s ability to achieve its profit maximization objective seems to indicate that there still may be misalignment between the salesperson’s incentives and those of the firm. For example, using a tiered sales commission structure leads to ‘gaming’ of the system by the salesperson. A salesperson can affect the timing of a sale or when a deal is closed to maximize salesperson incentives (Lartkin 2007). The manipulation of timing of sale is particularly relevant in industries with longer sales cycles, giving greater control to the salesperson. Agency theory based problems associated with salesperson behavior has led to greater discounts and lower prices of products, leading to sub-optimal levels of profits. These effects are more pronounced where sales are pushed towards the end-of-the-quarter in an effort to maximize the salesperson incentive. Pushing the sales to quarters that improve salesforce compensation imposes operational constraints and creates inventory management problems for the organization (Kamarkar 1996).

In this research, we examine one specific type of gaming behavior of the salesforce – end-of-quarter-scrambling (EOQS). End-of-Quarter-Scrambling is defined as the effort of the salesperson to close deals around the end of an incentive period. EOQS is concerned with the timing of sales efforts, such that a disproportionately large amount of time is spent closing deals at the end of a quarter. The incentive period can be the end of a quarter, month or year. Existing literature using agency based arguments would suggest an incentive misalignment between the objectives of the salesforce and the company and a change in the compensation plan can change EOQS behavior.

### **Theoretical Background and Conceptual Model**

We examine the salesperson EOQS behavior using an alternate, yet relevant theoretical lens. We draw extensively from the well-established automaticity and habit formation literature to address the question, are salespeople habituated to scramble at the end of a quarter? Habit reflects the “cognitive, neurological, and motivational changes that occur when behavior is repeated” (Wood, Quinn, and Neal 2005). Habit formation creates associations in memory between actions and stable contexts in which they are

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performed (Verplanken and Wood 2006). These contexts could be performance times, location or other stable feature of a context. Let's take a simple example to understand habit formation. Mary eats breakfast every morning at 8 am (context cue). Mary initiated this repeat behavior so as to leave for work at 8:30 am (goal). Over repeated actions, the goal of leaving for work on time is disassociated from memory such that Mary eats breakfast at 8 am on weekends, holidays etc. In such stable repetitive contexts (e.g. periodic sales reporting), *we term a behavior as habit if (a) responses are identical (b) they are independent of goals and (c) they lead to a disassociation between goals and responses.*

In the context of salesperson behavior, we believe the need to meet or exceed sales quota triggers a scrambling response at the end of a quarter. With repeated scrambling at the end of a quarter, associations form in memory because of stable performance times (end of quarter). We draw largely from Wood and colleagues work on how context cuing leads to habituated action (Wood and Neal 2007; Wood, Tam, and Witt 2005; Verplanken and Wood 2006). In the sales context, even those salespeople who are ahead of quotas still appear to indulge in scrambling at the end of quarter (*Author interviews*) Accordingly, the cued context of end of quarter will likely lead to the salesperson's habituated response of scrambling at the end of the quarter. Accordingly,

*P1: End-of-Quarter-Scrambling (EOQS) behavior by salespeople is a habit*

EOQS has huge costs for the company, thus an important follow-up question is what can firms do to disrupt EOQS? Firms can use downstream or upstream intervention techniques to change habits (McKinlay 1975) (see Figure 1). Upstream interventions work towards changing the performance context for all individuals (see Table 1, for examples) while downstream interventions are designed to change behavior of individuals who have a fundamental disposition towards a certain type of behavior. All salespeople, whether new or with longer tenure, may develop this disposition in different ways. Those with longer tenure may exhibit EOQS behavior while new hires may form their dispositions by the very nature of immersion activities that organizations conduct in good faith for new hires (e.g. ride along, internships, mentoring etc.). Downstream intervention techniques are geared towards changing the minds of individuals with information. Typical downstream interventions to change habits create awareness on the downside of the habitual behavior. For example, to reduce obesity, obese individuals are provided information on the downside of excessive weight. Downstream interventions rely on individual decisions to change habits. We consider training as one such downstream intervention that can change salesperson EOQS behavior. We expect training to accomplish three things. 1. Training will communicate clearly the impact of EOQS on the organization's ability to achieve its goals 2. Using retrospective self-referencing (Krishnamurthy and Sujana 1999) it will help trigger biographical memories of salespeople as it relates to their personal stress when they indulged in EOQS behaviors and finally 3. It will help salespeople self-discover professional life without scrambling using anticipatory self-referencing (Krishnamurthy and Sujana 1999). Through classroom training that focuses on participant-centered learning firms can provide information on the downside of EOQS to the company and the individual salesperson. Formally stated:

*P2: Training will lower EOQS behavior in salespeople*

Prior research also suggests that the effect of downstream intervention is further strengthened with a change in context. Individuals with habituated behavior use a confirmatory information search strategy (Betsch et al. 2001). Individuals with strong habits in familiar decision contexts access information that support the habit and avoid any information that might challenge it. Information that is accessed is used to encourage the habit rather than question it. Accordingly, we believe that training as an intervention to disrupt EOQS will be more effective in the case of new and less experienced salespeople than more experienced salespeople. New employees experience a change in the location, work with new colleagues, and perhaps experience some changes in their personal life as well. The new employees experience a "natural shift in the performance environment" (Verplanken and Wood 2006, p. 91), which could further strengthen the effect of training in changing EOQS habit. Thus, training, a downstream intervention, is likely to suppress the onset of EOQS behavior among new hires and reduce them for those with longer tenures. Formally stated:

*P3: Training lowers EOQS behavior of newly hired salespeople more than existing salespeople*

In addition to downstream interventions firms can also engage in upstream interventions to change EOQS habit. Downstream interventions generally alleviate existing negative outcomes, but upstream interventions aim to prevent negative outcomes. Upstream interventions are geared towards making macro-level policy changes that are designed to prevent undesired outcomes and are likely to be effective in the long run (Kane et al. 2004). Economic changes have shown to be an effective upstream policy initiative for well-defined goals. Drawing from this literature, in the context of EOQS and salesperson behavior, there may be a need for incentive realignment. Firms that we spoke to have two type of incentives. The first one deals with commission on sales with a flat bonus on achieving quota and the second one deals with ‘telescopic incentives’ where the bonus percentage increases with percentage achieved beyond quota. Type of incentives along with the timing of payment constitutes an incentive program. Many programs currently in force do not explicitly address the EOQS problem. A change in incentive programs due to modified incentive type and timing of payment may create a cost of EOQS for the salesperson and can potentially disrupt EOQS behavior.

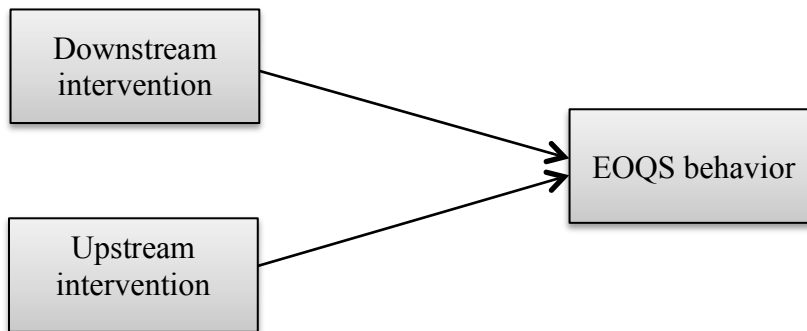
*P4: Financial incentive will lower EOQS behavior*

**Discussion**

To test our hypotheses we plan to collect data using a field experiment in one or more partnering organizations. On conclusion of the data collection and analysis, we believe the findings of our research will shed light on an important gaming technique used by the salesforce - EOQS. The findings of the study have huge implications for the organization and the salesforce. First, change in EOQS behavior of the salesforce will lead to an increase in firm profits, as EOQS leads to lower prices and greater discounts. Second, the operations department of the firm gains from better inventory control. Finally, disrupting EOQS behavior helps the salesperson as well. Typically, the end of a quarter is associated with a high degree of uncertainty and stress. The efforts of the salesperson to avoid EOQS can improve his/ her quality of life. By examining the effects of both downstream and upstream interventions, this research complements the agency theory based research on sales compensation plans. The far-reaching benefits of disrupting EOQS behavior have long term implications for both researchers and managers.

**Figure 1**

**Strategies to disrupt End-of-Quarter-Scrambling behavior of the salesforce**



**Table 1**

**Upstream and Downstream Intervention**

<b>Downstream intervention</b>	<b>Upstream intervention</b>
<ul style="list-style-type: none"> <li>Relies on individuals to change behavior based on their self-assessment of the risks.</li> <li>Example, training provides information on the downside of EOQS behavior. The training material will include information on the decline in prices and profits for the organization. It will also include information on how change in EOQS behavior leads to lower anxiety, stress, and better work life balance for the salesforce.</li> </ul>	<ul style="list-style-type: none"> <li>Macro-policy level interventions that change the performance context.</li> <li>Example, sales compensation usually includes a commission based on the level of sales. The performance context can be changed by providing an additional incentive to salespeople with low variability in sales.</li> </ul>