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Perspectives on the Design and Effectiveness of Pharma Sales Contests

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1. Introduction

1.1 Background on Sales Contests

Axtria periodically receives questions from pharma clients on whether they should proceed with conducting a sales contest, and if so, how should a successful sales contest be designed in order to achieve desired outcomes? The question on whether companies should or should not conduct sales contests, also known under the general category of special incentive programs (SIPs), is not a new topic for discussion. A review of the practitioner literature finds a *Harvard Business Review* article from 1924 on the subject,¹ while the top academic journal in marketing, *Journal of Marketing*, contains articles from 1949 and 1953 on this topic.²³ So questions about the design and effectiveness of sales contests have long been of interest to practitioners and academic researchers.

Companies annually spend an enormous amount of money on sales contests according to recent estimates. A 2009 study estimated annual spend exceeding \$9 billion on sales contests,⁴ while a 2010 study found more than \$26 billion of annual spend on such programs.⁵Yet, despite such significant investments, there is a general lack of understanding and robust empirical evidence on the effects of sales contests on company sales, individual customers and salespersons, and how variations in program design affects the achievement in desired outcomes.

Why do companies use sales contests? A 1988 article on the subject provided four reasons why companies have sales contests (quoted material in italics): 1) *To keep morale up*; 2)

To boost dollar sales per salesperson or to increase units sold per salesperson; 3) To increase the number of new accounts; and 4) To launch new products.⁶ Interestingly, while all of the preceding reasons are certainly important, companies can generally incorporate these goals into the traditional incentive compensation (IC) plan without the added cost, logistical complications, and risk of possibly sending confusing mixed signals to sales reps as to what their selling priorities are in order to achieve company strategic objectives. Thus, a few questions among others to be studied later are the need for sales contests assuming a well-defined and executed IC process exists, and are sales contests generated for other reasons than those stated from the 1988 article? These problems will be later discussed and addressed in this white paper.

1.2 White Paper Objectives

This white paper will cover an array of topics pertaining to the development, execution, and outcomes from sales contests to provide sales operations leaders practical guidance on key questions they face from business leaders regarding these sales programs. The following areas of investigation will be reviewed on sales contests, first on their application across industries, and then specifically regarding their execution and effects in the pharma industry:

- 1) Do variations in sales contest design affect outcomes as expected from such programs?
- 2) What is the effectiveness of sales contests as well as generating side effects?



- 3) What role does salesperson perceptions about sales contests, motivation, behaviors, and job satisfaction have on the effectiveness of such programs?
- 4) What is the effect of sales contests on generating customer value?

This white paper will proceed with a review of the academic literature on sales contests addressing the above four areas of investigation. This literature review will be followed by comments from an experienced Axtria principal who worked on both the pharma manufacturer and consulting sides dealing with the execution and analysis of sales contests. The lead author of this white paper has many years of experience leading all sales force optimization (strategy) and sales operations (execution) processes while closely collaborating with senior commercial and sales leadership on these issues on the pharma manufacturer side. This white paper will conclude with final remarks for further discussion and research to be considered by pharma companies.

2. Review of the Academic Marketing Literature on Sales Contests

This section reviews the academic marketing literature on sales contests across industries to establish a baseline of thinking before we go into pharma practitioner experiences on this topic. The review will be segmented into four topic areas with a summary provided on key points from papers per section on sales contests: 1) effect of sales contest design on outcomes, 2) sales contest effectiveness, 3) salespersons perspectives on sales contests, and 4) customer value impact of sales contests. Quoted material is in italics.

2.1 Effect of Sales Contest Design on Outcomes

- Empirical results from survey and conjoint data provided by sales forces from across three companies yielded outcomes consistent with hypotheses developed using 'expectancy-value theory of achievement motivation'.^{7,8}Their research provides *exploratory analyses how individual*, *supervisory, and sales setting characteristics may affect preferences suggest potential boundary conditions for initial findings.⁷ The results lead to an improved awareness of the determinants of contest design preferences as well as insights and implications for sales managers to design effective contests.⁷*
- 2) Two empirical studies conducted found that the prize structure matters.⁴The number of prize winners in sales contests should be greater than 1 to affect sales performance, but the creation of *rank-ordered prizes into contests with multiple prize winners does not boost sales effort and performance*.⁴
- 3) An earlier theoretical study postulated similar results mostly with the study noted in 2), but with some differences. Salesperson effort is lower when there are larger people competing for prizes or when sales uncertainty is high.⁹ Rank-order sales contests are superior to a multiple-winners contest format.⁹



2.2 Sales Contest Effectiveness

- An exploratory study looked at how sales contests contribute to sales and profit goals but may also produce negative side effects that work against generating greater profit, adversely affect sales force morale, and decrease customer relations.¹⁰
- Sales force characteristics in conjunction with sales contest planning policies affect sales contest success.¹¹ This study not only analyzed how sales contests contribute to profit but also generate negative side effects.¹¹
- Multiple regression analysis empirical studies found that sales contests produce a net positive effect on company sales and profits.¹²
- 4) A paper that proposed a research agenda into the study of sales contests and whether they effectively stimulate individual salespeople and boost overall sales based on salesperson's expectancy, instrumentality, and valence for the sales contest.¹³
- 5) This 2016 empirical study found numerous results of practical importance when designing sales contests and measuring sales contest effectiveness:¹⁴
 - a) The timing of the sales contest matters. While companies want to give notice to salespersons regarding an upcoming sales contest so they may prepare accordingly, the timing of announcements relative to the program can have unintended

effects. Prior work has shown salespersons engage in strategic timing of games when sales contests are announced, causing the stalling and/or withholding of orders pre-test.¹⁵ This is consistent with the research literature showing that temporal deadlines like sales contests can induce adjustments in salespersons' efforts.¹⁶⁻¹⁷

- b) The implication noted in a) is evidence that 'sandbagging' occurred by salespersons. Sales will dip below the baseline before the contest. Salespersons will delay closing deals and/or purposely position themselves prior to the sales contest in order to win bigger during the sales contest. This is consistent with previously noted research and a study from a prior conference in sales management.¹⁸
- c) Sales increase above the baseline during and after the sales contest. This result is consistent with the references cited in this paper.
- d) Sales gain is higher in districts with lower sales potential. Prior research has shown that territory potential has a significant effect on the salesperson's perception about goal difficulty.¹⁹
- e) Sales gain is higher among salespeople with higher sales ability. Salespersons with higher ability will have greater confidence to produce during the sales contest and thus have less of a need to engage in sandbagging relative to salespersons with lower ability.²⁰

2.3 Salespersons Perspectives on Sales Contests

- a) Salesperson motivation to perform and job satisfaction affects sales contest outcomes.²¹
- b) Salesperson perceptions about sales contests need to be considered when proposing sales contests.²²
- c) Lesser problematic behavior of salespersons not mitigated by company code of ethics and value stances can adversely affect the implementation and outcomes of sales contests.²³

2.4 Customer Value Impact of Sales Contests

- a) This study analyzed *the effects of contests on individual customers*, specifically *the impact on longterm customer value*.⁴
- b) This study demonstrated a greater long-term value per customer in the retained customer cohort and lower short-term and long-term value per customer among the two other cohorts (acquired and add-on customers).⁴
- c) Lastly, this study found *no adverse impact on other drivers of customer value such as customer churn and purchase frequency.*⁴

This review of the academic marketing literature on sales contests across industries is meant to provide useful insights, guidance, and baseline thinking when understanding how sales contests are designed and work in actual practice in the pharma industry.

3. Perspectives About Pharma Sales Contests in Actual Practice

Understanding how sales contests work in actual practice is the purpose of this section. An experienced Axtria principal, Devesh Verma, Ph.D., was asked to provide perspectives on this topic as someone who dealt with sales contests as a brand director on the pharma manufacturer side but also designing and analyzing sales contests while consulting numerous pharma clients. A series of questions were posed to Dr. Devesh. Below are his responses (noted in italics).

1) What are the various reasons why pharma sales contests are instituted?

In my experience, sales contests were designed to act on new market dynamics (such as a formulary win with a national payer), putting greater emphasis on 90-day prescriptions (Rxs), or putting greater emphasis on one brand for a short duration. There can be many reasons to design a sales contest, but the primary goal is always to provide short-term impetus to sales reps to do something incremental for a brand or franchise.

2) Do variations in pharma sales contest designs affect outcomes as expected from such programs? Please explain which sales contest designs work better than others and why (you can surmise)?

In my observation, sales contests provide short-term lift to sales or whatever the other metric they were designed for. But the bigger question here is, how long the short-term gains continue? Contests that are aligned with the overall business strategy outperform contests that are not well thought through from an overall business perspective.

3) What is the effectiveness of pharma sales contests? Please explain. For example, do we see evidence of effects of sales contests pre-test, duringtest, and post-test, and in what direction relative to baseline sales?

Sales contests have the most impact during the test period. I have heard anecdotal evidence of sales reps "sandbagging" the pre-period. But it's not very easy to change the baseline sales. The baseline sales also impact core IC for the reps in the pre-period, so the reps are careful not to mess around with their core IC.

There is also some positive carryover impact of sales contests in the post-period, but any post-period impact wanes down quite rapidly (over 3 to 6 months).

- 4) Do pharma sales contests generate side effects (either positive or negative)? See examples below:
 - a) Is there empirical evidence of "sandbagging"? In other words, sales reps purposely lowering pre-test sales in order boost sales contest winnings?

I have only heard anecdotal evidence of this effect but have never seen any clear evidence of "sandbagging" in the data.

b) Is it a common practice that sales contest designs adjust for variations in territory potential and sales rep ability (and other factors) before determining prize winners? Explain what adjustments are done? If none, explain why not?

Typically, "yes"! But it's not as rigorous as designing the core IC for sales reps.

c) Do sales contests affect the selling emphasis by sales reps of other drugs in their portfolio bag that are not subject to a direct sales contest? Explain any effects.

Most "other" brand teams believe that someone else's sales contest is negatively impacting their



sales. But I have not observed any significant change in Rxs for other brands. Many times, brand teams compete with each other to offer the best possible contest plan to their sales teams!

d) Do particular brand teams ask for doing sales contests? In other words, do brand teams that feel they were shortchanged during the sales force optimization process use sales contests to circumvent the overall weighting of effort assigned to sales reps on brands?

Yes, that happens! But a company with a strong governance process on contests, including instituting strong governance on contest design, can avoid getting in this trap!

e) How do sales contests as applied affect the sales force strategy design of sales rep effort by brand? What, if any, portfolio effects do we see regarding sales contests?

Contests can temporarily change the sales rep behavior to focus on short-term impact for a particular brand on a specific metric. This can negatively impact call plan achievement or the overall long-term selling strategy for the company.

 f) Can the goals of sales contests be designed into the traditional incentive compensation process without the need for implementing special incentive plans (SIPs) like sales contests? Explain.

Not always. Sales contests are designed to capitalize on short-term opportunities (like a change in national formulary) and for a particular brand or franchise versus the core IC is designed for the entire portfolio and focused on mid-term goals (increase brand volume, share, etc.). Many times, such short-term opportunities are not well understood in advance to factor in the core IC plan. Additionally, brand teams have leveraged core contests to get their key message(s) out to the field.

I have personal experience of designing a contest with a focus to increase 90-day Rxs for a brand. 90day Rxs (typically) provide lower out-of-pocket to the patients (especially with a use of the brand's co-pay card) and also increase the length of therapy on the brand. Hence, the contest became a win-win for the pharmaceutical company and the patient. Such metrics are more difficult to include in the core IC plan but have positive association with the core IC plan to increase the overall brand's share. The contest helped the brand get the sales team focused on the core message for the brand and at the same time complemented the core IC plan.

g) Any other side effects not noted above? Explain.

Sales contests, if designed and managed well, can be positive for the pharma company. The bigger issue is having too many contests for the field, which leads to a lack of focus for the sales reps. It becomes challenging for a sales rep to determine whether to focus on their call plan, their core IC, or other metrics in their sales contests.

5) Is there any evidence or concern regarding pharma salesperson perceptions about sales contests, motivation, behaviors, and job satisfaction when measuring sales contest effectiveness? Explain.

I have not heard any major concern from pharma sales people about the contests. In general, they like the idea as contests provide an opportunity to receive additional incentives on top of their core compensation. Many (if not all) sales contests are funded by the brand teams. Therefore, sales leadership is also in support as sales contests provide additional incentives to their team members without any incremental financial burden to them.

6) What effects do sales contests have on generating customer value? Explain.

I am not sure about the overall value for the customers. It's very difficult to estimate any long-term value for the customers. In the short-term, contests provide short-term lift to sales but their impact on longterm sales and customer value is not well understood.

4. Conclusions

The intent of this white paper is to provide leaders in pharma sales operations guidance on the design and effectiveness of sales contests that will achieve both strategic and tactical objectives. The preceding review of the research literature and perspectives from a brand director who implemented sales contests show that such programs can be useful to achieve desired goals. However, sales contests must be carefully designed and implemented in such a way to minimize unintended effects and to avoid sending mixed signals to salespersons that redirect effort in a way that runs contrary to achieving strategic goals of which the IC plan is designed to support. The lead author's experiences in overseeing sales force strategy and sales operations processes on the pharma manufacturer side affirm this concern. Brand teams that feel they were shortchanged during the sales force optimization process in their assignment of sales effort often seek alternative means to do an "end run" around the traditional IC plan. The way to mitigate this concern is to have a strong governance process in place as noted by Dr. Verma that prevents detrimental portfolio effects. These concerns mean having a full appreciation and expertise for not only the proper design and measurement of sales contests but also how such programs interact with the development of strategic sales force outcomes derived from the optimization process. Finally, and not addressed in this white paper, but an issue of growing importance, is greater scrutiny by regulatory and public legal authorities that often use salespersons incentives as evidence to support claims that pharma companies use monetary rewards to encourage the creation of perceived negative behaviors. Thus, pharma companies, using such thinking, are complicit in knowingly encouraging bad behaviors by salespersons. A careful design of sales contests, along with proper measurement, and a strong governance process in place, can allow pharma sales operations leaders to derive intended benefits from such programs while minimizing unintended adverse effects.

Appendix – Bio of Contributing Author



Devesh Verma, Ph.D., is a Principal at Axtria with over 20 years of experience in pharmaceutical brand marketing, sales, and analytics. Over these years, Devesh has managed multibillion-dollar brand franchises, led pharmaceutical sales teams, and built analytics teams on both the pharma manufacturer and consulting sides. Devesh is passionate about bringing harmonized omnichannel customer experience in the industry and leads Axtria's Marketing Solutions practice. He earned a doctorate in Business Administration and a master's in Aerospace Engineering from the University of Minnesota, and a bachelor's in Aerospace Engineering from the Indian Institute of Technology at Kharagpur.

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