

Sales-Force Decision Models: Insights from 25 Years of Implementation

PRABHAKANT SINHA
prabha.sinha@zsassociates.com

ZS Associates
1800 Sherman Avenue
Evanston, Illinois 60201

ANDRIS A. ZOLTNERS
andy.zoltners@zsassociates.com

J. L. Kellogg Graduate School of Management
Northwestern University
Evanston, Illinois 60208
and ZS Associates

Over 25 years, we have developed many sales-force and modeling insights through over 2,000 projects with several hundred selling organizations in over 50 countries. Content insights are useful in making sales-force decisions. Examples are that profitability is flat for a wide range of sales-force sizes; phased sales-force growth is rarely optimal; focused strategies dominate scattered strategies; most sales territories (55 percent) are too large or too small; and no compensation plan satisfies everyone. Implementation insights concern model building, use, and implementation, for example, a model's economic value can come from such sources as reduced uncertainty, accuracy, increased speed, objectivity, and stakeholder involvement; theory and practice have different and complementary perspectives; experience and wisdom are sometimes better than models; and models provide insights, while people make decisions.

Two global firms recently merged and asked us to help them design new sales organizations in each of 40 countries. The integration would affect over 15,000 salespeople. In just two months, over 100 people from our consulting firm used well-

tested normative sales-force decision models with strong implementation processes to design and integrate the sales forces. We could not have imagined such an undertaking when we began our careers as marketing modelers in the early '70s.

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At the beginning of his teaching career in 1973, one of the authors (Zoltners) fearlessly made a pronouncement to a business models class, "In 15 years, models will play a prominent role in most major business decisions." In this paper, we examine how this author would adapt his proclamation after implementing models for over 25 years.

Our modeling experience is narrow and deep. We have used descriptive and normative models repeatedly to address decisions concerning such sales-force issues as size, structure, resource allocation, incentive compensation, and geographic deployment. The descriptive models have characterized how markets react to various sales-force decisions while the normative models were optimizers that searched the solution space to find the best sales-force decision (Table 1).

From 1983 to 2000, we, along with our colleagues at ZS Associates, a consulting firm focusing on sales-force issues, have implemented these models in over 2,000 projects for hundreds of organizations. Two to three percent of all of the field salespeople in the US have been touched by the results. The firms had pressing issues that required quick attention. Companies sought help when merging separate selling organizations, when launching new products, when facing deregulation, or when faltering in performance.

We have learned, and our clients have learned from this experience. Two types of insights have surfaced. Content insights stem from observing the results of repeated model applications across companies, industries, countries, and contexts. They are insights about sales-force sizing,

sales-resource allocation, sales-force deployment, and sales-force incentive compensation. Implementation insights are lessons that we learned about model building, model usage, and model implementation.

Three project samples were chosen to quantify some of the content insights. The samples were convenience samples. They included projects that were well documented and easy to access. The ZS-SRA Sample is designed to develop sales-force size and resource-allocation insights. It comprises 50 sizing studies in six countries with sales forces ranging in size from 35 to several thousand. All of the studies were conducted for companies that manufactured and sold health-care products.

The ZS-TA Sample is used to develop sales-territory-alignment insights. It is based on 36 different sales-force-alignment implementations in eight industries. All implementations were in the US and Canada.

The ZS-IC Sample is used to develop sales-force incentive-compensation insights. It is based upon seven compensation studies in six industries. All implementations were in the US and Canada.

Our content insights are provided next. **The Model Builder Learns Through the Model-Building Process**

Descriptive marketing models are developed to learn about market behavior and marketing theory. Normative marketing decision models are designed to help managers make good marketing decisions. But normative decision models can also contribute to marketing theory. They have produced many useful sales-force insights for their model developers.

Sales-force issue	Relevant decisions	Descriptive model	Normative model
Sales-force size and resource allocation	Determine sales-force size Allocate sales-force effort to market segments and products	Sales-response models describe how selling effort affects the sales for market segments and products	Usually nonlinear programming models that maximize 3 to 5 year profitability for alternative sales-force sizes and product and market allocations
Sales-territory design	Assign accounts or geographic units to salespeople	Models calculate coverage, disruption, and profit impact of alternative assignments	Usually integer programming models that maximize coverage, minimize disruption, or maximize profit
Incentive compensation	Design incentive plan	Nonstandard models relate incentive compensation plans to company sales and profits, for example, disaggregate models link plan elements with each salesperson's utility for time and money, and sales response models link each salesperson's call effort with territory sales to develop the aggregate relationship	Nonstandard models, for example, individual utility-maximizing time-allocation models feed aggregate sales-response maximizers

Table 1: These sales-force issues lend themselves to implementable descriptive and normative modeling initiatives.

Effort Drives Sales

That marketing investment drives sales is a fundamental principle supported by data (Figures 1 and 2). Most executives believe this principle, yet they sometimes use decision rules that run counter to its premise:
—While addressing his divisional vice presidents of sales, a CEO of a Fortune 50 firm stated that last year he “cut the total company sales-force size and sales went up.” He did not allow any of the divisions to increase their sales forces and cut most of them. Will sales go up even further if

he cuts the sales force again?
—Having completed a rigorous model-based analysis, a national sales manager made the following recommendation to his division president: “We need more salespeople, a 10 percent increase in size, and I project that we can increase revenues by five percent.” The president’s response was, “So you think that you can increase revenues by five percent? Do it! But keep the head count the same—just get 10 percent more efficient.” What an outcome—the president increased the sales manager’s revenue goal without increas-

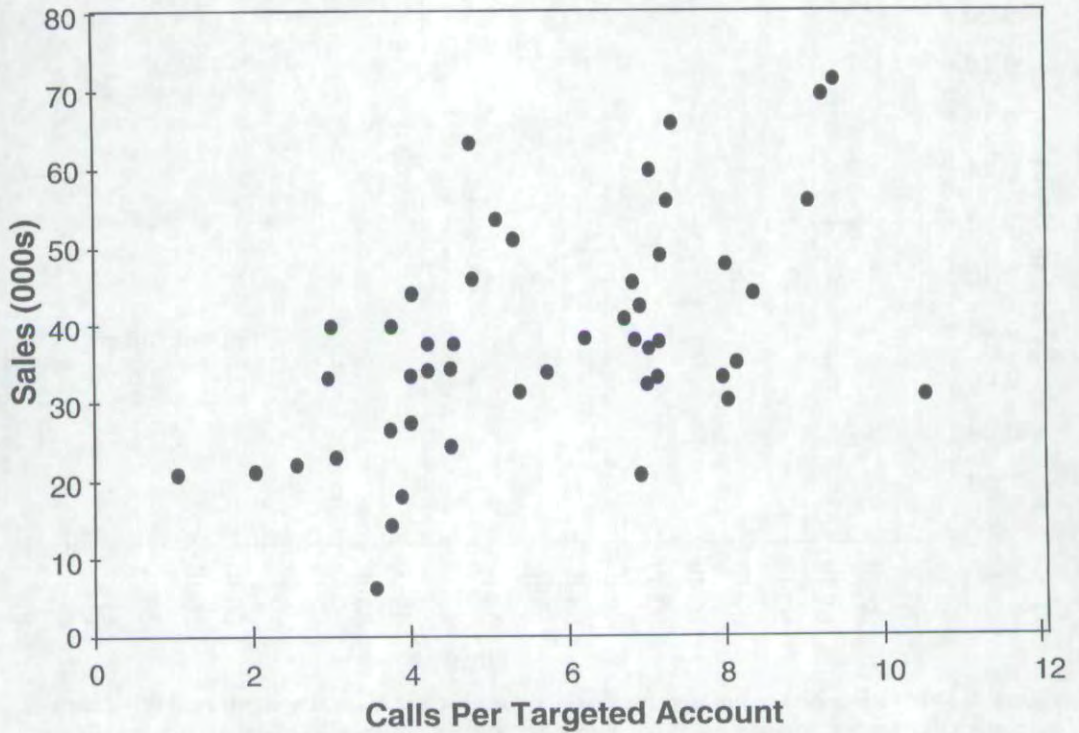


Figure 1: This scatter plot using cross-sectional data shows a statistically significant relationship between sales-force effort and sales for a market segment serviced by a medical sales force. Every dot represents a sales territory.

ing the sales force. Will this manager make such a proposal ever again? —At an internal sales-force productivity workshop, a country general manager asserted that he maximized profits. When asked how, he responded that he “kept sales-force costs at 11 percent of sales.” These examples demonstrate that some managers don’t incorporate the premise that sales-force effort drives sales into their investment philosophy. The CEO would have had even higher sales had he not cut his sales force. The division president believes that the best way to increase sales is by increasing productivity. It was interesting to observe the president’s reaction when he was told that the sales-force size might actually need to be increased as

a result of a productivity improvement. Productivity improvement lowers the average cost of a sales call. Consequently, customers and prospects that were not profitable enough to call on become worth the call. Finally, the country general manager was evoking a backwards principle by suggesting that sales should drive sales-force effort.

Two rational reasons for these decision rules are likely. First, top managers may believe that the extra investment needed to increase size would be wasted because weak management processes would not increase effective sales activity. Second, they know that the costs are incurred now and are certain, but most of the impact is in the future and is not guaranteed. How-

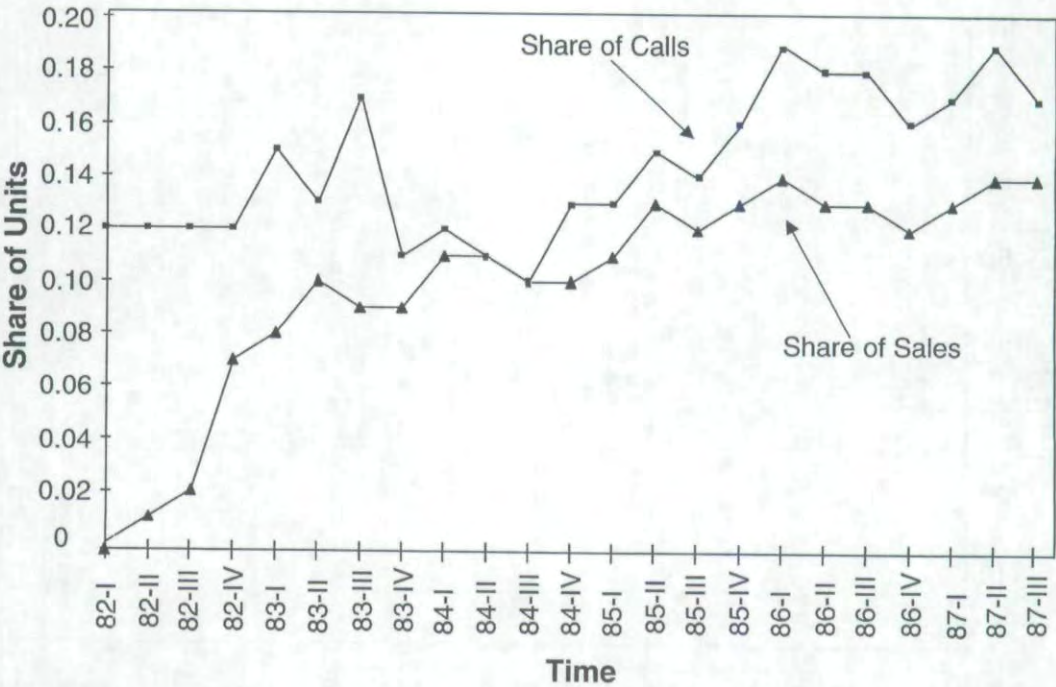


Figure 2: This scatter plot using longitudinal data shows a statistically significant relationship between sales-force effort and sales for a product sold by a pharmaceutical sales force. Every dot represents a quarter of the year.

ever, a well-managed increase in sales-force size usually leads to incremental short- and long-term increases in sales but not necessarily to short-term increases in profits.

To determine the winners of its annual incentive trip, a large consumer-products company ranked its sales territories from the highest to the lowest performing. The ranking showed that the fourth best territory (out of 250) in the country was a vacant territory. Who should go on the trip? How does this happen?

Carryover

In most industries, carryover from prior years' selling effort contributes to current sales in a territory. Some selling environments favor carryover more than others. Significant differences in carryover can

even be observed across products sold by the same sales force. For example, in the pharmaceutical industry, acute-care products, such as antibiotics or antihistamines, have low carryover because patients typically take these medications for short periods. Salespeople can often persuade physicians to try new acute-care medications particularly when they have little health risk associated with them. Chronic-care products, such as blood pressure medications or Alzheimer's treatments, typically have high carryover. Once patients start using such medications, they will likely stay on them for a long time. Physicians are reluctant to switch patients from medications that are working, and they tend to prescribe products for new patients that they have found effective in the past.

Carryover can be quite pronounced. The ZS-SRA Sample provides insight into the size of the carryover that can be expected in the health-care industry. The 95-percent confidence interval for the aggregate sales-force carryover for the 50 companies that were members of the sample is 75 to 85 percent in the first year, 62 to 78 percent in the second year, and 52 to 70 percent in the third year (Figure 3).

Sales forces are undersized if the carryover effect is not considered. The best first-year sales-force size changes depending on which criterion management decides to use. Based on the ZS-SRA Sample, the best sales-force size using a one-year

contribution criterion is 18 percent smaller on average than the best size using a three-year discounted contribution criterion (Figure 4).

The Flatness Principle

Company profitability can be flat for a wide range of sales-force sizes around the optimal size. Other authors have observed this result as well [Chintagunta 1993; Mantrala, Sinha, and Zoltners 1992; Tull et al. 1986]. The ZS-SRA Sample demonstrates the degree to which flatness is evident in practical settings. The three-year discounted contribution varied, on average, two percent for sales-force sizes that varied plus or minus 20 percent from the

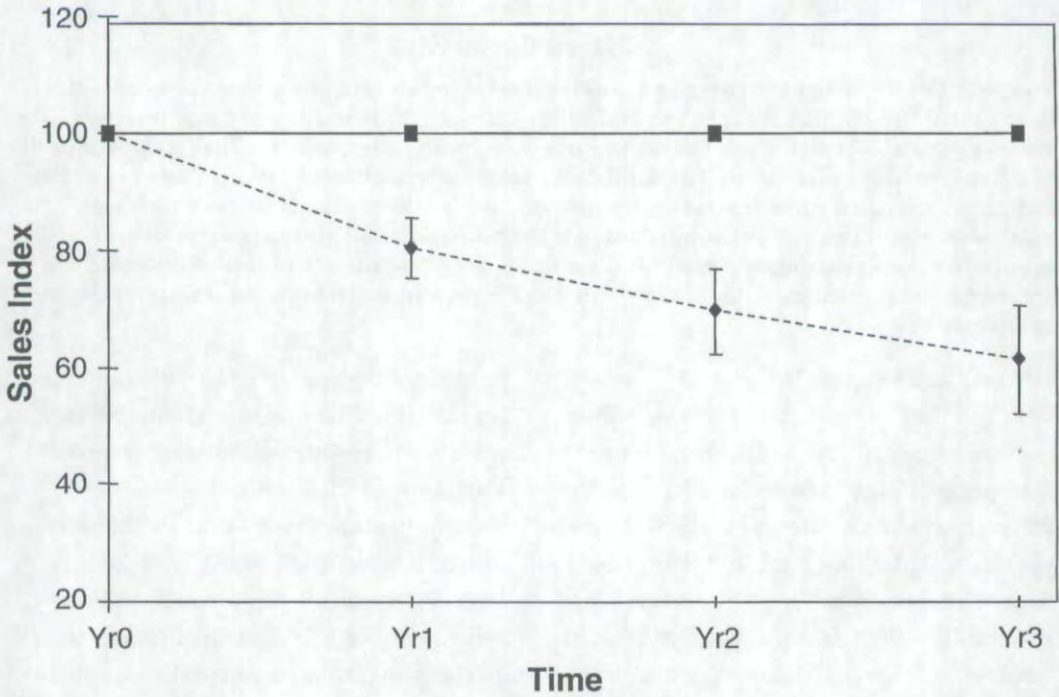


Figure 3: The magnitude of sales carryover across companies in the ZS-SRA Sample. We define the base-case effort plan for any company as its current three-year sales-force size, structure, and resource-allocation plan. The base-case scenario (solid line) represents the average performance across all of the base-case plans for the companies in the sample. We indexed sales at 100 in each year because sales levels varied across companies and over time. The zero-effort scenario (dashed line) represents an average model-based projection of sales if the 50 companies were to have no sales forces. It is an estimate of carryover.

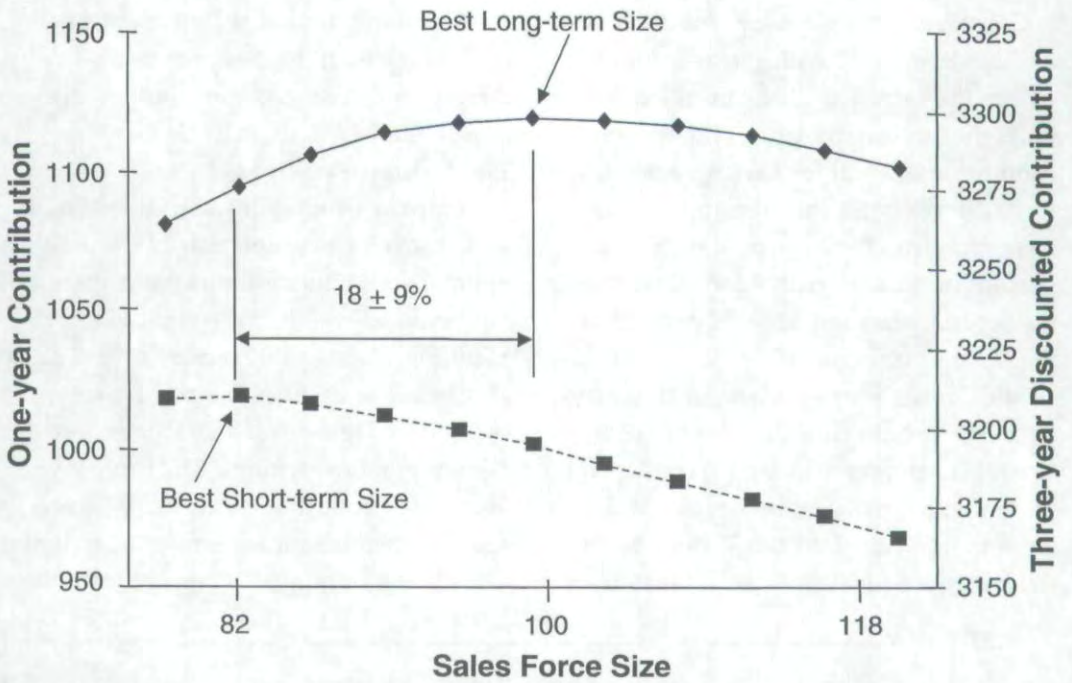


Figure 4: The impact of carryover and multiyear thinking can affect the best sales-force size. Based upon the ZS-SRA Sample, the best sales-force size (95 percent confidence interval) is between nine and 27 percent smaller using a one-year contribution criterion than a three-year discounted contribution criterion. The solid curve represents the three-year discounted contribution and the dashed curve represents the one-year contribution associated with different sales-force sizes. The one-year contribution is defined as net sales minus consolidated variable product costs, advertising and promotion costs, field-support costs, and sales-force cost. The three-year discounted contribution is defined as the present value of the next three years of contribution.

optimal size (Figure 5).

When they are asked to increase sales, most sales executives will ask for more salespeople. This makes sense since sales-force effort drives sales. The ZS-SRA Sample calibrated a more subtle result: Resource allocation has a bigger impact on profitability than sizing. The cliché “work smarter, not harder” is appropriate. For the 50 companies in the ZS-SRA Sample, a size and resource-allocation strategy was available that would produce, on average, a 4.5 percent contribution improvement over the company’s current or base case three-year sales-force strategy. Only 29

percent of the incremental improvement was attributable to a size change; the rest was due to resource allocation (Figure 6).

Variation in Elasticities

Optimization theory tells us that a resource is allocated optimally if the incremental returns are equal across all marketing entities (for example, products, markets, activities, and marketing-mix elements) that want the resource. How close do companies actually come to allocating their sales-force effort optimally? We calculated sales-response functions for each of the over 400 products promoted by the 50 companies in the ZS-SRA Sample. As-

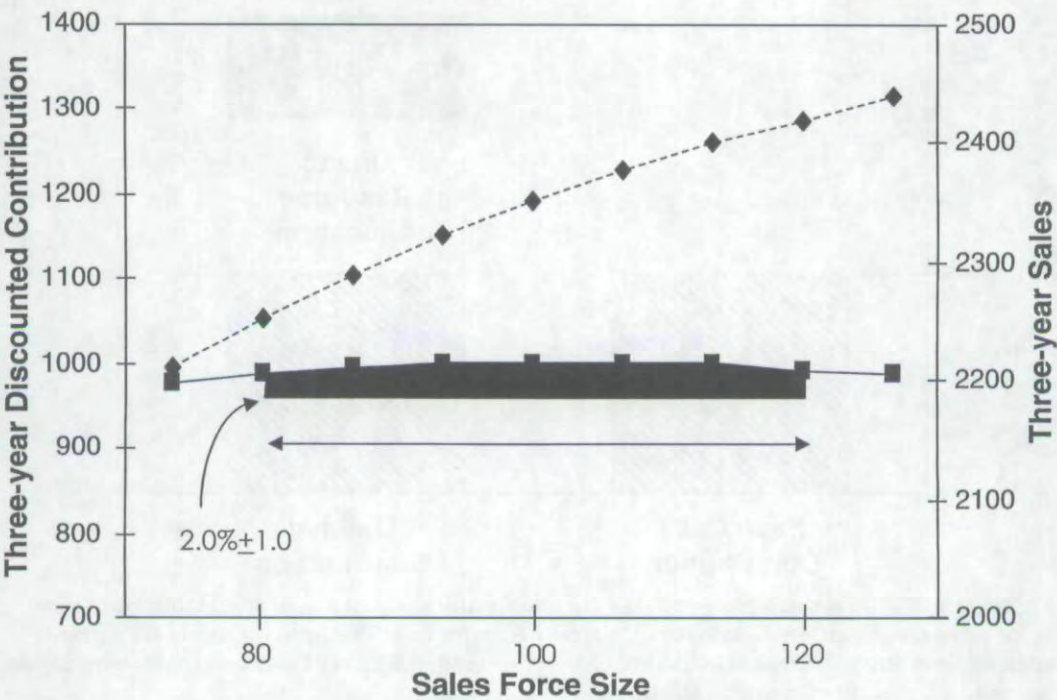


Figure 5: The ZS-SRA Sample demonstrates that long-term profitability is flat over a large range of sales-force sizes. Three-year discounted contribution varied between one and three percent (95-percent confidence interval) for sales-force sizes that ranged plus or minus 20 percent from the optimal size. We normalized all sales-force sizes to 100 and the three-year discounted contribution to 1,000 to facilitate comparison across the 50 companies in the sample. Three-year sales appear as a dashed line and three-year discounted contribution as a solid line.

suming that they implemented their current base-case effort-allocation strategies, the ratio of the largest incremental return to the smallest incremental return averaged more than eight. These companies were not very effective in allocating sales-force effort. The ratio of the largest incremental return to the smallest incremental return was 5.57 for the five products promoted by one company (Figure 7).

Upsizing and Downsizing Rules

Decision makers in the ZS-SRA Sample were reluctant to assume the risk associated with increasing sales forces. The management teams sized their company's sales forces, on average, at 97 percent of the op-

timal size when measured from a three-year perspective but only 83 percent of the optimal size when measured from a five-year perspective. They favored short-term interests over long-term interests.

Decision makers used different rules when increasing and decreasing sales forces. They stopped adding people when the incremental return on their sales-force investment dropped below 50 percent. They could have continued to add people and increased profits but chose this risk-averse cut-off criterion. For downsizing decisions, they required only a positive, incremental long-term discounted contribution. That is, they maximized profits.

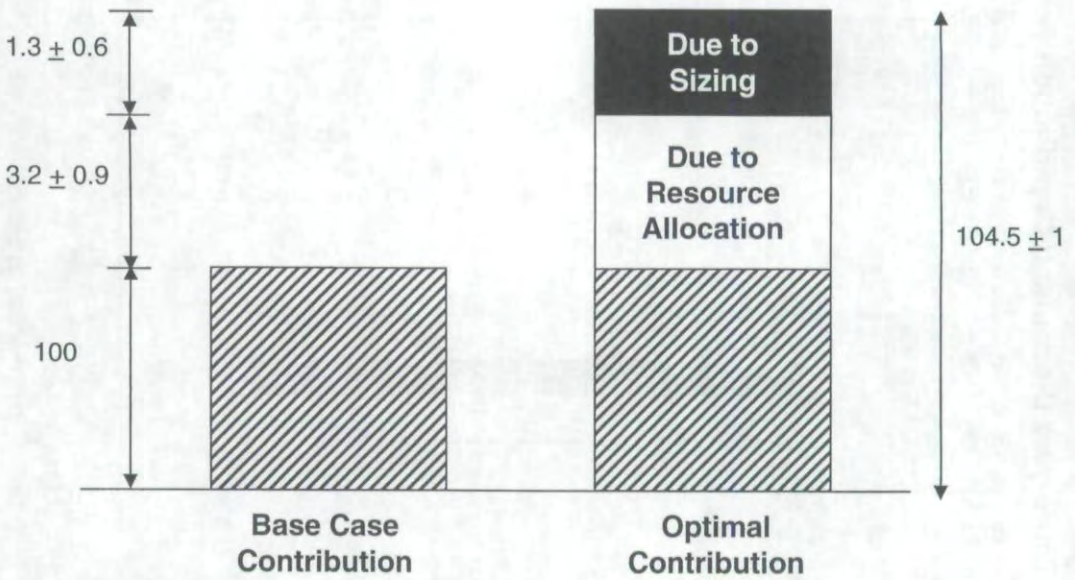


Figure 6: The ZS-SRA Sample compares the impact of improved sales-force sizing and sales-force resource-allocation decisions on company contribution. The joint impact is 4.5 percent with a 95-percent confidence interval of (3.5–5.5 percent); 3.2 percent was due to resource allocation and 1.3 percent was due to sizing.

A 50-percent incremental return-on-investment criterion would have required more severe reductions of the sales forces. If they had interchanged these cut-off criteria they would have expanded their sales forces by more under favorable circumstances and downsized them more in unfavorable environments.

Concerns Beyond Models

In many instances, business processes apart from the model can manage the practical concerns about the output of a model. Sales-territory-alignment models search the space of all possible ways of grouping accounts and geographies into balanced territories for salespeople to cover. Trillions of potential alignments can be developed even for small sales forces. Most companies' alignments are far from optimal. Zoltners and Lorimer [2000] showed that 55 percent of sales territories

in a typical company are either too large (impossible to adequately cover all accounts) or too small (salespeople are wasting calls on low-value customers). Most companies can improve sales and profits through better alignment. Yet sales executives are reluctant to revise their alignments because they don't want to disrupt current salesperson-customer relationships.

To shed light on the sales impact of disrupting salesperson-customer relationships, we analyzed empirical data for an industrial distribution sales force that had realigned its territories using an optimization model. We tracked monthly sales prior to and following the realignment. We identified two groups of accounts: a test group and a control group. The test group consisted of about 4,500 targeted accounts whose salesperson had changed.

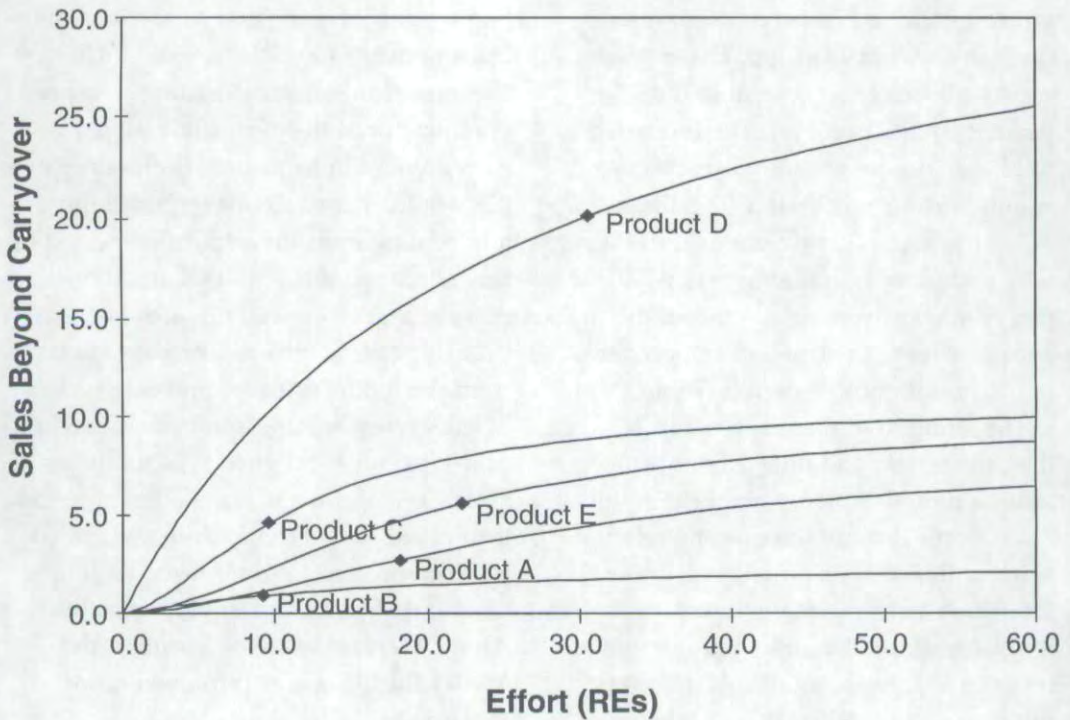


Figure 7: These five sales-response functions were derived for the five products sold by a medical-equipment company. The dots represent the planned sales-effort allocation and expected sales. The incremental contribution for each product was calculated by applying the product margin to the incremental sales at the planned effort level. The calculated incremental contributions are for Product A, \$164,381; for Product B, \$69,245; for Product C, \$385,696; for Product D, \$270,206; and for Product E, \$198,068.

Test-group accounts had maintained a relationship with the same salesperson for at least eight months prior to the realignment and then a different salesperson for seven months following the realignment. The control group consisted of approximately 44,800 targeted accounts not affected by the realignment.

We segmented accounts within each group based on their annual purchasing volume. We created six volume segments: extra-small-volume purchasers (\$2,000 to \$4,000 per year), small-volume purchasers (\$4,000 to \$8,000 per year), medium-volume purchasers (\$8,000 to \$20,000 per year), medium-large-volume purchasers

(\$20,000 to \$50,000 per year), large-volume purchasers (\$50,000 to \$100,000 per year) and extra-large-volume purchasers (over \$100,000 per year). We tracked average monthly sales for each account segment over a 13-month prealignment period and a seven-month postalignment period and then compared results for the control and test groups.

During the prealignment period, the monthly sales trends for the two groups were similar. During the postalignment period, however, some differences between the test and control groups emerged: The large-volume purchasers (\$50,000 to \$100,000 per year) in the test

group purchased 20 percent less than those in the control group. These results were statistically significant at the 95-percent confidence level. The estimated total loss in sales at these disrupted accounts was approximately \$2 million.

For those purchasing under \$50,000 per year and those purchasing over \$100,000 per year, there was no significant difference in sales to control and test accounts in the postalignment period (Table 2).

The strength of the relationship between the salespeople and their accounts provides a partial explanation of the results. Salespeople did not have strong relationships with accounts purchasing under \$50,000 prior to the realignment. A change in relationship, therefore, had little impact on sales to these accounts. At accounts purchasing over \$50,000, however, salesperson relationships before the realignment were stronger, and hence, a change

had a significant impact. At accounts purchasing over \$100,000, the sales force took the transition seriously. Exiting salespeople introduced the new salespeople to each account in transition. Both salespeople would share account responsibility and commissions for a specified period of time. Because of this special attention, these accounts showed no sales loss.

In this case, a business process apart from the model solution prevented a loss in sales when salesperson-customer relationships were realigned. The model results were useful and compelling, but the firm relied on a disruption-management process for successful implementation. **Corporate Sponsors Develop Insights About Market Behavior Through the Model-Building and Implementation Process**

The repeated application of several normative sales-force-decision models has

	Extra-small accounts	Small accounts	Medium accounts	Medium-large accounts	Large accounts	Extra-large accounts
Annual purchasing volume	\$2,000 to \$4,000	\$4,000 to \$8,000	\$8,000 to \$20,000	\$20,000 to \$50,000	\$50,000 to \$100,000	\$100,000 +
Total sales volume in millions (percent of total)	\$22.1 (2%)	\$65.2 (6%)	\$220.4 (20%)	\$291.7 (27%)	\$182.4 (17%)	\$306.6 (28%)
Was purchasing affected by a change in salesperson (95% confidence level)?	No	No	No	No	Yes	No
Did strong salesperson relationships exist before realignment?	No	No	No	Somewhat	Yes	Yes
Was relationship-transition program implemented?	No	No	No	No	Somewhat	Yes

Table 2: A study establishing the impact on salesperson-customer relationships after a major model-based sales territory alignment shows that disruption can be managed using business processes apart from the model. An account transition program minimized the disruption for extra-large accounts for an industrial distributor.

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produced a series of insights that have lead to a number of valuable sales-force insights.

The Percent-of-Sales Rule

Cost containment approaches for sizing sales forces do not maximize profits. Many companies employ a cost-of-sales percentage calculation for their sales-force-sizing decisions. They like to constrain the ratio of sales-force costs as a percentage of total sales to be smaller than a preset value. The US average is 6.8 percent. This heuristic ignores the principle that sales-force effort drives sales. Sales-force cost ratios and profits are negatively correlated for sales-force sizes less than the profit-maximizing sales-force size (Table 3). Companies that favor small sales-force cost ratios tend to undersize their sales forces.

Timing-of-Sales-Force Impact

Changes in sales-force size, structure, and resource allocation do not always have immediate impact. Carryover is quite strong in many markets. Managers who over-promise when they ask for sales re-

sources will be disappointed because the consequence of their strategy will take longer to appear than they anticipate. Managers who reduce their investment will frequently be very pleased with their decision in the short-term because sales will be impacted minimally for six to 18 months. The impact accelerates with time, however.

Phased Growth

Several years ago, a small pharmaceutical firm acquired the rights to market two products in the United States. The company had paid close attention to its financial performance. The sales force had to earn its way, and only significant sales growth would warrant expanding the sales force. The sales force grew as the products succeeded in their markets—one even became the market leader. Executives walked around with smiles on their faces.

The company left hundreds of millions of dollars on the table because it didn't launch hard. It built sales too slowly, didn't take advantage of carryover, and

	Current plan	Expansion	Reduction
Number of salespeople	100	150	50
Sales	\$100,000	\$120,000	\$70,000
Cost of goods sold (20%)	\$20,000	\$24,000	\$14,000
	\$80,000	\$96,000	\$56,000
Sales-force cost	\$10,000	\$15,000	\$5,000
Other marketing cost	\$5,000	\$5,000	\$5,000
Administrative costs	\$5,000	\$5,000	\$5,000
Pretax profit	\$60,000	\$71,000	\$41,000
Sales-force costs as percent of sales	10.0%	12.5%	7.1%
Sales per territory	1,000	800	1,400

Table 3: This example shows why cost-containment approaches are not profit maximizing. Pretax profit and sales-force costs as a percentage of sales are negatively correlated for sales-force sizes smaller than the profit-maximizing sales-force size.

didn't compete aggressively with later market entrants. Many model implementations have shown that phased sales-force growth is suboptimal (Table 4).

Launch Hard; Protect Strengths

When launching new products, companies should launch hard but also protect their existing products. This usually requires adding salespeople.

A successful new product launch usually demands a sizable selling investment. Launching a new product or entering a new market can take 50 to 60 percent of a sales force's time, drastically curtailing the time available to existing products and markets. Assuming that existing products will retain their sales in the absence of selling effort is dangerous. Sales may be maintained due to carryover for a short period but will suffer in the long run even for strong products. Many existing products fail to make their sales targets when companies launch new products.

The only way to launch hard and protect existing products is by expanding the sales force. However, this strategy has a risk of its own. The firm may need the expanded capability during only a short strategic window. Some firms look to alli-

ances or partnerships in these cases; others take a risk, increase their sales forces, and rely on attrition to reduce the sales-force size if capacity is needed for only a short period of time. US sales-force-personnel turnover rates average about 20 percent. This implies that a firm can manage its new product and service opportunity by increasing the sales-force size and then use attrition to systematically bring the field-force size back to a desirable steady-state level.

Focused Strategies

Focused strategies dominate scattered strategies. One company's sales plan called for its 100 salespeople to spend time selling all of its 37 products—"sell everything in the bag". How much time could each product receive? An optimization algorithm recommended the sales force support only eight products. Profit-maximizing strategies focus the firm's resources on many fewer customers and products than marketing managers often recommend.

We performed three types of analyses on a convenience sample of size and resource allocation studies for 14 companies and found support for focused strategies.

Strategy	Sales-force size				1998		3-Year	
	98	99	00	01	Sales	Profit	Sales	Profit
A	300	380	380	380	330	83	1090	351
B	300	350	380	380	315	84	1035	321
C	300	320	350	380	290	87	970	301

Table 4: The short-term and long-term consequences of three expansion strategies for a sales force that was launching several new products shows that phased growth can be suboptimal. Strategy A is the quick-build strategy and Strategy C is the slow-build strategy. Three-year profits for Strategy A are forecast to exceed those of Strategy C by \$120 million, while one-year profits for Strategy C exceed those for Strategy A by \$4 million. Companies often face trade-offs between short-term and long-term profit maximization when expanding their sales forces.

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The different analyses were performed because the size and resource-allocation models developed for the 14 companies were all different and consequently, the resource-allocation decisions were not comparable.

An optimization model for three business-to-business manufacturers recommended that they increase their focus on high-volume accounts (Table 5).

The target audience for the 18 largest products sold by the sales forces from five pharmaceutical companies were also analyzed (Table 6). The optimization models showed that the number of physicians that were targeted by the companies should be decreased by 39.3 percent for 13 of the products if the companies wanted to maximize their profits. The five remaining products were very large products requiring a large customer reach. The optimization models recommended no reduction in the target market for these products. The average decrease across all products was

27 percent.

Examining the products requiring the greatest sales-force effort and determining how many of them consume 50, 67, and 75 percent of total sales-force resources is another way to assess effort concentration. The fewer the number of products, the more concentrated the effort allocation. Optimization analysis across six pharmaceutical sizing and resource-allocation studies showed that effort concentration increased approximately 10 percent (Table 7).

Selling Partnerships

Selling partnerships come in several forms. They can be copromotions in which several firms sell one or more products, or they can be arrangements in which one firm contracts with another organization or series of organizations to provide selling effort for its products. In either case, the selling investment that would optimize overall system profits exceeds the sum of the selling investments that would

		Segmentation based on volume		Current allocation of effort	Optimized allocation of effort
Segment		Percent of current sales	Percent of accounts		
Company A	1	60%	3%	29%	36%
	2	37%	46%	51%	64%
	3	3%	51%	20%	0
Company B	1	94%	61%	77%	100%
	2	6%	39%	23%	0
Company C	1	76%	35%	52%	60%
	2	17%	28%	30%	31%
	3	4%	15%	7%	9%
	4	3%	22%	11%	0

Table 5: The output of an optimization model demonstrates the degree to which companies need to change how they allocate their resources across volume-based market segments if they want to maximize profits. The three companies are business-to-business manufacturers.

Product	Percent change in the number of physicians that need to be called on (optimized vs. current strategy)
1	-68.5
2	-63.2
3	-61.1
4	-58.3
5	-48.6
6	-40.0
7	-37.8
8	-31.9
9	-28.9
10	-14.9
11	-14.3
12	-9.9
13	-9.3
14	0
15	0
16	0
17	0
18	0

Table 6: The output of an optimization model demonstrates the amount of reduction in the number of physicians that need to be called on if five pharmaceutical firms want to maximize their profits for the 18 largest products that they promote. The reduction ranges between 0 and 68.5 percent and averages 27 percent.

maximize the profits of the individual partners.

The best strategy for each partner is to allocate selling effort across customers and prospects until the marginal return of the selling effort is equal to the marginal cost of the selling effort. The depth of penetration depends upon product margins. With higher margins, a firm can call on more customers and prospects before its calls become unprofitable. Product margins are shared when organizations enter into partnerships giving each partner only a fraction of the total margin. Each partner will

stop calling on accounts and prospects that would have been profitable with the higher margin. Neither partner will increase its effort unilaterally beyond its desired level even though the consortium's profits would increase by calling on more customers.

Realignment Overlooked?

Roughly 55 percent of sales territories in the US are either too large to be covered adequately or so small that calls are wasted. How does this happen?

There are trillions and trillions of good alignments. Finding a good alignment of territories is a large combinatorial problem that requires lots of effort. The task is often delegated to local district sales managers burdened with many other responsibilities. Even if the district managers do provide good alignments, the global alignment will be poor if the district boundaries are not optimally designed or if the districts are sized incorrectly.

A second reason for poor alignments is that companies seldom have good definitions of what constitutes a good alignment. Some authors suggest that a good alignment is profit maximizing [Lodish 1975; Skiera and Albers 1996; Zoltners 1976]. Most managers feel that it should be disruption minimizing. In practice, good alignments balance territory workload. The best workload measures are calibrated to account for territory market potential.

Third, sales forces resist change. Many firms retain poor alignments because sales managers want to avoid the risks associated with reassigning accounts among salespeople and because salespeople press to service their established account