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How Many SE's Does It Take To Sell A Solution?

Part 1 - Organizational History

"Back up the truck - we need to take six different SE's for this demonstration."

As product portfolios grow and expand so do the number of Sales Engineers required to sell a solution. This drives Sales VPs, Sales Operations, Financial Controllers and Pre Sales Management crazy. So is it a fact of life that we should accept, or are there strategies you can adopt to reduce the number of multi-legged sales calls? At what point does the good old-fashioned sales team of a single rep paired with a single SE become an archaic reminder of the way things used to be?

In this two-part series I will first look at the typical growth history of a vendor, in effect, "how and why did we get to this point?" and then next month examine strategies for both sales and presales to reduce the size of the truck. Also in keeping with the theme of last month's recommended SE book "[The Back Of The Napkin](#)" each of the diagrams is a scanned copy of a diagram from the back of a bar napkin.

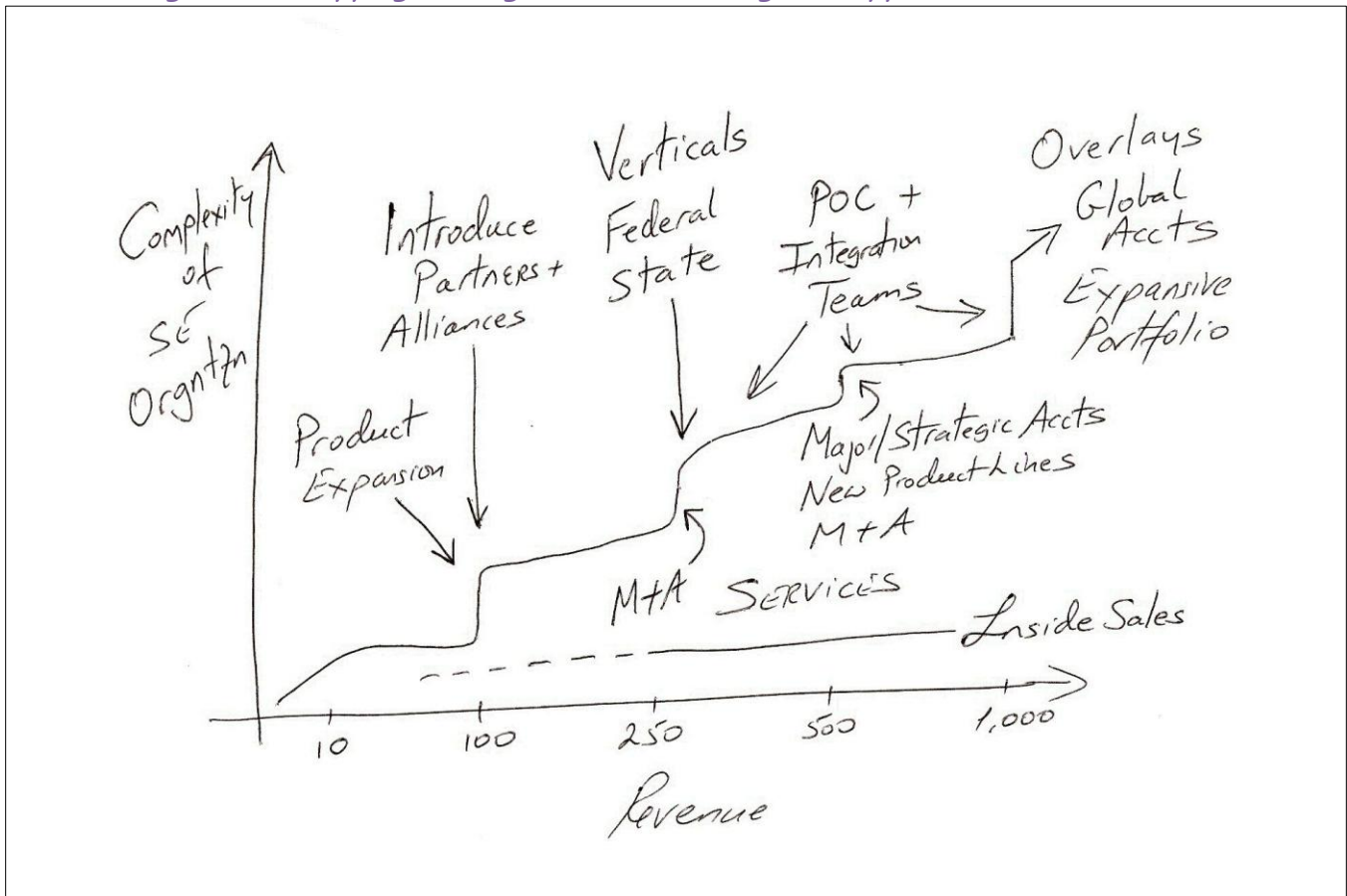
The Early Stages

As a small single-product start-up progresses through the complete corporate portfolio lifecycle there are a number of key breakpoints which cause organizational stress and resultant change. (Much like financial funds - your results may vary and past performance is no guarantee of future results). A small company will start with several SE's covering 5-6 sales people and everyone reports to a VP of Sales. Product installation and implementation may be covered by the SE, Engineering resources, external partners or an ad-hoc combination put together for each new client. The SE organization will grow a little faster than sales until there are enough SE's to merit their own leader. At this point sales may split into 2-3 geographies (East, West & Central in the US or North & South in Europe). Although the Quota-carrying Rep/SE ratio is greater than 1 it starts to

decrease steadily - particularly if complex proofs or trials are required for software or hardware.

The first major breakpoint occurs either when (1) a partner-driven organization starts to take deals directly, or vice-versa or (2) the product has grown sufficiently that only the "old-hands" know all the modules/components in depth and new-hires never get to that point so they can catch up. Since it takes longer for an SE to ramp up to productivity (6-12 months) than a rep (3-4 months) the Rep/SE ratio starts tending towards 1:1. Growth then continues in Sales and Pre-sales as organizational changes to support vertical or federal/state business occurs or a meaningful Merger/Acquisition (>20% of revenue) happens. The Rep/SE ratio may now dip below 1 as each group of pre-sales engineers require their own specialists who understand either the business area or the technology applications. Part II will look at optimizing the infrastructure to minimize some of the skill duplications.

Figure 1 - Mapping of Organizational Change to Approx Revenue Growth



The Growth Phase

Most organizations will now be ramping up an internally staffed services/consulting team and a telesales organization. A Strategic Accounts sales and presales team may spin off from regular Commercial accounts - each with their first-line management structure. The product portfolio is now broad enough that no single SE (or Salesperson) can reasonably cover it other than at initial discovery or high-level architecture meetings. Because each of these organizations continues to need their own specialists (what sales person doesn't want "his presales guy/gal?") the SE population rises faster than the sales force. This is usually the point at which financial controllers start focusing on cost of sale and the alleged overhead of presales. The Rep/SE ratio may be as low as 0.7 for software companies and nearly 0.5 in hardware companies. For the US, a standard revenue benchmark is \$2.5M of revenue (license, maintenance and services) per individual SE.

At this stage, if sales overlay positions have not been created because of acquisitions they will appear due to the sheer complexity of the product portfolio. These are hybrid positions between SE's and Sales who are collectively responsible for part of an existing salesperson's quota. They do not carry incremental quota. This naturally increases organizational complexity and cost of sale. The sales and presales teams now become even more fragmented as the degree of specialization demanded increases to support multi-channel, multi-solution opportunities. Companies will also often introduce Global Account Programs for their 6-10 largest multinationals. The Rep/SE ratio is more difficult to calculate as overlays can be counted on either side of the equation, but will usually remain just under 1.

A further complication arises when dealing with the impact of multiple languages (Canada, Europe, Latin America), labor laws (Europe) and geographical distance (Asia/Africa) - which all serve to increase complexity and headcount. For example, having two product experts in Germany and Sweden does you no good when trying to sell in Spain.

In order to deal with this complexity, presales will have created centralized teams (sometimes globally, but usually regionalized) to handle common tasks such as integrations, proof of concepts/trials and even RFPs.

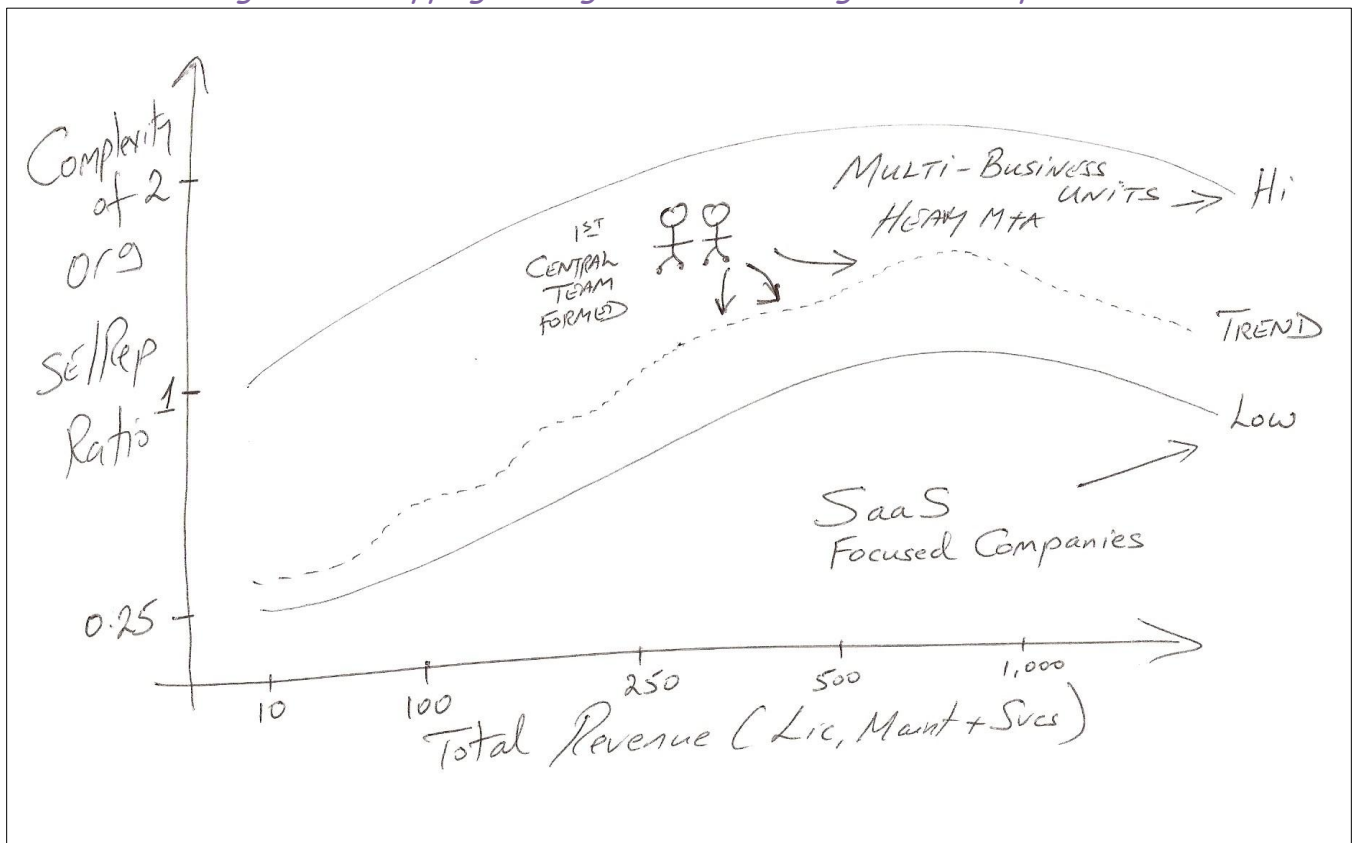
The Later Stages - The Impact Of "Solutions"

By now the entire sales organization will have undergone several rounds of "solution selling" training and there will be a heavy emphasis on expanding the size of each deal.

The larger companies believe they can defeat the smaller companies in their space by offering a larger portfolio of products. The smaller companies believe they can outmaneuver the larger companies by being more responsive, focused and innovative.

The large companies (>\$1bn revenue) have moved away from point product sales, which were previously covered by a single rep & SE, towards a multi-product integrated solution sale. At least that is what sales management wants to believe, however most salesreps are creatures of habit and will sell what they know. In this type of environment, even for just a mid-size deal, the size of the sales team grows - potentially including the account SE, several product domain experts and a "big picture/integration" type consultant - plus a SE manager. On the sales side there is the account manager, sales manager, sales VP, sales overlay specialist(s) to match the domain experts, plus various stakeholders for professional services, alliances and even support. Throw in a legal person or two and the size of the sales team easily matches the size of the presales team.

Figure 2 - Mapping of Organizational Change to SE/Rep Ratios



We've now reached the point where organizational structure is mostly dictated by finance and economy of scale rather than the true needs of the customer and the sales force -

both of whom are ultimately the 'customers' of the pre-sales team. Look at the comparison this way - think about just the hypothetical US-based portion of a worldwide SE team. Formerly this organization had 25 separate geographies or units, each of which would have required 20 SE's to cover each product line in full (defined as $\geq 95\%$ of requests). Assume that includes management and we're talking about 500 professionals. As a general rule of thumb, the US accounts for 50% of sales, so extrapolating that figure results in a WW SE force of 1,000 using the old models - obviously not a sustainable economic model.

Ironically, the span of control of the average first-line presales manager is 1-2 people per manager better than the corresponding sales organization. Meaning even at this level of complexity and duplication, presales is still being managed and led more efficiently than sales!

Summary

Sound familiar? In five pages we've grown from a small organization where everyone knows each other and every rep has their SE to work with on every deal - to a multi-solution, multi-channel corporation structured around internal needs and politics. Next month we'll look at the various ways both sales and presales can optimize their organizations to reduce the size of the customer-facing teams, and therefore the number of people who actually get paid on the deal. That will involve training, trust and taking the position that the customer comes first instead of corporate bureaucracy.

“The uncreative mind can spot wrong answers, but it takes a very creative mind to spot wrong questions..”

“Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats.

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Talking Points is a monthly column authored by John Care, Managing Director of Mastering Technical Sales. For more information on this and other Sales Engineering topics visit the website at www.masteringtechnicalsales.com.

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