

Building A Credible And Conservative ROI For VOIP

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An ROI analysis tells a story of business value. For IP-telephony applications, this story must persuade the CIO, CFO and business client of the value of these investment decisions.

Understanding return on investment is always vital, but ROI has become a topic of particular interest and importance as enterprises migrate to voice over IP (VOIP) systems for their telephony needs. Many enterprise decision-makers remain uncertain about how to determine ROI for IP-telephony.

In general, ROI exercises, as they're actually practiced, often include questionable assumptions about people and organizations, insensitivity to process costs, and an inadequate regard for the demands of financial analysis. To address these shortcomings, here are five simple rules for building credible, conservative ROI analyses that withstand scrutiny and raise ROI practice to meet the highest standard of business impact analysis.

1. Credible ROI analysis depends on reasonable expectations of people, not on what's possible in an idealized model.

A promising source of return from payroll savings may require compliance of workers, and your assumptions about human behavior in this scenario must be reasonable. For example, suppose a proposed application lets employees make business calls from home. Costs will be lower, but compliance and performance of workers outside the familiar business environment are less predictable and may not yield a theoretical maximum of cost savings.

When human behavior can diminish or negate the benefits, you should assume less than 100 percent compliance and therefore less than 100 percent of the possible savings.

A key variable in this evaluation is the degree of structure in applications. Contact center agents or help desk employees working from home are

enmeshed in procedures that, once the worker logs on, must be performed in compliance or, if not, with a listing of exception records for management scrutiny.

In contrast, the value of applications for the general employee population sometimes hinges on the employee's choice of alternatives. For example, road warriors may have several means to place calls, ranging from their enterprise's lowest-cost IP telephony option to dialing with a company credit card. Will each employee use the lowest cost method each time? Is it reasonable to expect someone to use a laptop to save a few cents on a call when in an airport, for example?

Savings are often projected from proposed changes in administrative tasks, but these are often unrealistic, as reductions in theoretical workloads fail to translate into dollar savings. For example, if hospital nursing staff or office receptionists are trained to perform moves, adds and changes (MACs), simplification of MACs will be welcome, but not credited as hard dollar savings in an ROI. Phone administration is easier, but the scrub nurse still draws the same salary—you haven't eliminated any other salary positions.

2. Costs recur, but they also evolve, and the pace of evolution makes a big difference over the course of an investment.

Purchasing the hardware and software for a proposed communications solution is only a beginning. To implement and live with the solution, you will also incur maintenance charges after warranty, upgrade purchases or subscription costs, and administrative or technical staff costs (wages, benefits, bonuses and costs such as training and real estate).

ROI analysis should take account of the fact that labor and maintenance costs often increase year over year and must be factored into an analysis. On the other hand, a greenfield or new application may bear the full brunt of these costs, but there may be savings from discontinued applications and equipment as well. With IP-telephony eliminating long distance charges in many cases, the newer application may serve many more users and have lower ongoing cost structure than the several silo-ed systems it can replace.

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If a proposed solution includes incremental revenue as part of its appeal, it may be accounted on the plus side of the analysis. But revenue gains bring their own counterbalancing offsets. The finance department should be consulted about incremental taxes from the expected revenue growth as well as any benefits that offset taxes, such as depreciation. A business impact analysis that glosses over these considerations will reflect more optimism than persuasiveness and can be correct only by coincidence.

3. Never give a benchmark the benefit of the doubt.

Benchmark values should raise a red flag in any ROI analysis, as they can grossly misstate the operational and financial impact of a solution. Benchmarks based on averages of reported averages are readily available but not meaningful.

It is not merely academic to note that benchmarks on some websites have a basis in surveys whose data lacks a central tendency (i.e., fails to conform to the “bell-shape curve” expectation), rendering them uninformative. More rigorous benchmarks are available; yet even these define contexts that seldom apply in all critical ways to your situation. Even very solid benchmarks are no substitute for first-hand analysis, and the use of benchmarks use can trigger skepticism in those who doubt that the context of the benchmark applies to their operations.

Consider this benchmark: “Seven percent of catalog orders are completed through the enterprise IVR.” But if orders are of different types, would that 7 percent apply across all orders from all types of customers? Table 1 shows a more granular analysis by associating the use of IVR with particular classes of calls (recurring orders and clearance orders) where an automated customer transaction is most likely to achieve a successful conclusion.

A granular analysis provides a more descriptive and realistic view of the use of IVR for processing orders, taking into account the cost of each type of order and the magnitude of IVR processing for each type of order. In Table 1, a too-high-level view overestimates savings while underestimating the number of calls that will be handled in the IVR.

Instead of invoking benchmarks, consider

instead determining a viable threshold of impact—that is, a payoff span or a level of benefits that justifies the cost of an investment.

Let’s say you are proposing an enterprise out-bound dialer application integrated with a voice response system to handle collections of medical co-payments that are numerous but of too-low value to be worth committing agents’ time. The purchase and integration cost is \$400,000. If you want to recoup that in a year (or might be asked to do so), and the co-payments being sought average \$15, you must be confident that your business has more than 27,000 unpaid co-pays to collect within a year ($\$15 \times 27,000 = \$400,000$) to account for a reasonable collection rate.

With high credibility, you can introduce all the plausible elements of an analysis including:

- a.) What is the likely collection rate, and how many total clients must be contacted?
- b.) How many fewer uncollected dollars could be turned over to outside collections?
- c.) How many fewer staff might be required if callers may enter their own credit card numbers to pay without agent assistance?
- d.) An estimate of payroll savings, if fewer staff will be required.

All this requires no benchmarks, just tests of reasonableness.

4. A year of process changes doesn’t pay off on day one, but even a cautious accountant accepts payoff by day 365.

Sometimes an ROI assumes that a full year’s worth of benefits arrives at the beginning of the accounting period featured in an analysis. Accountants are too sophisticated for that. If you must identify a date when all the benefits arrive at once, it should be the last day of the period of analysis. This assumption is no more right, but it is at least a conservative simplification, not challenging your credibility.

Also, look to see if all the months of the first year of benefits are credited with full run-rate benefits. In many cases, system cutover does not coincide with full fruition of savings. If a contact center is to develop labor savings of a nominal 15 percent based on attrition, it may take six months until headcount drops to the 85 percent level. Or again: If hundreds of employees must load new communications tools on PCs and laptops, the

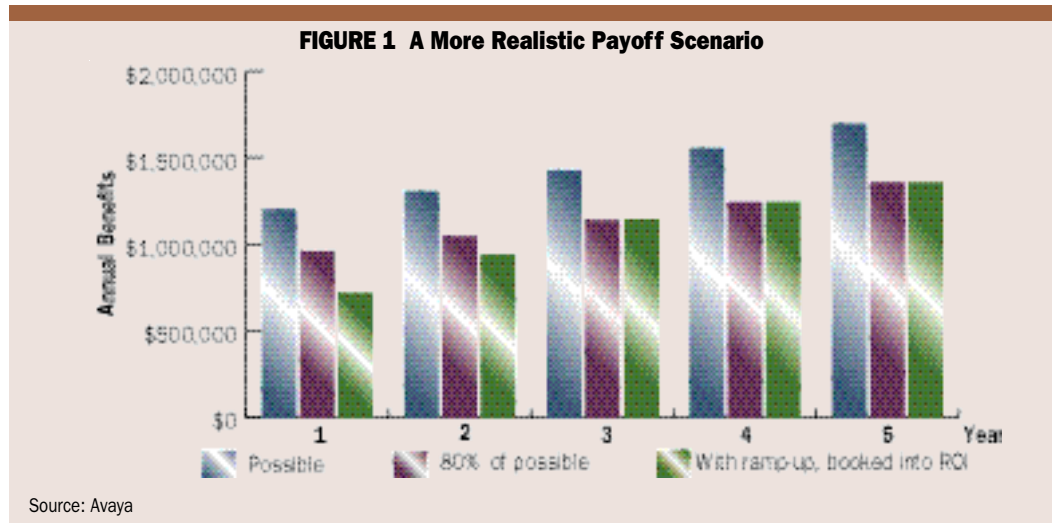


Don’t budget for an entire year’s savings starting on day one

TABLE 1 A More Granular IVR Analysis

View	Type Of Order	Percent Processed On IVR	Calls Per Month	Monthly Cost	Automated Orders	Monthly Savings
High Level	All Orders	7%	20,000	\$100,000	1,400	\$7,000
	Total Savings					\$7,000
Granular	Recurring Orders	40%	5,000	\$8,000	2,000	\$3,200
	Clearance Offers	14%	2,500	\$12,000	350	\$1,680
	One-time Orders	0%	12,500	\$80,000	0	0
	Total Savings					\$4,880

Time savings may not always equate to higher productivity



client may need to stage the rollout to reduce pressures on technical support desk staff.

The longer it takes to see the full benefit, the longer the investment will take to pay off, and the financial returns will be lower. The assumptions in your ROI, however, are now more realistic and persuasive (Figure 1).

Although your results will show a longer payback period and a lower internal rate of return (IRR), you raise the credibility of your analysis if you allow time for benefits to ramp up after cutover. Overstating the early level of benefits exaggerates the net present value and gives a misleading impression of early payback.

5. Fractions of people’s time add up to units of payroll, but cutting a fraction of effort may not yield payroll savings.

If a faucet drips a quart a day, you can collect it and apply it productively to the houseplants. But it’s often hard to collect saved drips of time in such a way as to shrink payroll in proportion to the accumulating total.

For example, if communications applications have the potential to remove one hour of unproductive time from each employee’s week, how should that be captured in terms of dollars? The 60 minutes coming in short increments may not be collectible for a useful new purpose. The employee will cost the same to the company with or without the productivity gain (as in the example above of nurses doing moves, adds and changes).

Instead, in some cases, you might argue that workers will remain more energized, hence more likely to make additional sales calls or productive engagements—but refrain from assigning a hypothetical revenue gain to this factor.

In the case of staffing in a contact center, while an overall savings in workload of 15 percent might be possible, there is the practical consideration of how to reduce staff by 15 percent in every interval of the day. At times, the number of staff to handle a set of calls might be too few to make the full 15 percent savings possible.

For example, if 18 people were staffed in a particular area in the evening, a 15 percent staff reduction means 2.7 fewer people. You might be able to achieve required service levels while reducing staff by two people, saving 11 percent, but you may find that trimming the last fractional staff (even if it is practical from a scheduling standpoint) may jeopardize service levels.

Staff reductions during times of day where abandonments are particularly high may also be less advisable until the solution has had time to show its impact. In general, booking 75 percent to 85 percent of these savings into the ROI represents a conservative and credible outlook.

On the other hand, drips of time can sometimes be given new utility. Your employees might be able to squeeze in return calls following failure to close a sale, and thereby present a competitive offer not yet seen by the customer. The business would gain not only in sales but in customer retention.

If up to this point your analysis has been conservative and balanced, you may now have earned the credibility to venture a soft-dollar revenue enhancement estimate based on hypothetical gains in revenue. A fraction of increased productivity for revenue-generating employees, times the margin on revenue per employee per hour, can be added to an analysis for an alternative up-side view.

Conclusion

These five simple rules are common sense, but opportunistic ROI analysis frequently violates them. ROI tools often ignore considerations of human nature, accounting principles, and the true use and benefit of the investment in a given enterprise. Methodologies must be sensitive on these points and open for inspection. Only an adequately granular view supports conservative, credible forecasts that achieve the high standard of business impact analysis. Such a standard can assure the CIO, CFO or business unit leader that the