

COST STRUCTURE AND DISTRIBUTION IN TODAY'S CONTACT CENTERS

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INTRODUCTION

For years, contact center professionals of all sorts – vendors, consultants, analysts, media, practitioners and leaders in both operations and technology – have been quoting statistics about the relative costs of contact centers. Most of us have seen pie charts that show labor as the biggest slice of the pie, with various breakdowns of the other elements, such as network/ telecommunications, technology, real estate and utilities, and overhead costs. Analysts and vendors occasionally publish their view of the cost structure. Various surveys, including one we co-sponsor through our partner Centerserve, gather input from participants to get insights into their contact center cost allocations.

While the fact that labor is the highest cost is self evident, the ranges in what percent labor consumes can range from 55–80% in these various sources. Network and telecommunications costs have plummeted over the last decade, and so perhaps those costs consume a smaller portion than they have historically. Then again, maybe not, as centers do more and more complex and interesting things with their networks. Readers must take survey or benchmarking results with a grain of salt, as no two contact centers define their budgets elements in the same way – both in terms of what is included and excluded, and how the costs are calculated. Is IT a direct charge, or an internal charge back? Is it potentially inflated? Is IT staff included in the technology cost? Is labor an hourly rate or a loaded cost? Does the company allocate rent and utility costs to the center? With such a range of variables, we began to wonder how costs really are distributed in a contact center today and we set out to put some clarity to the numbers.

This white paper is a result of that curiosity about what the costs really look like in today's economy of low cost but potentially high functionality telecommunications networks, high cost labor (with correspondingly high turnover), robust technology, and high-cost real estate. We think it's important to understand the structure of the cost of a contact center, as it could (and should!) influence strategic investment decisions, organizational, process, or technology changes, and tactical adjustments that might have more wide-ranging impacts on overall operational costs. And we think it is important to base these numbers not on surveys or historical data, but rather on modeling analysis that uses operating costs that are representative of today's contact centers and looks at true cost to the business.

Our approach was to model contact center costs for three representative centers – small, medium, and large – using a process–based analysis approach and comprehensive modeling tool. We thought it was important to vary the key elements that can change a center's makeup – such as self–service technology – and see what impact it has on the cost distribution. Our goal in this analysis is to drive out clear, consistent cost breakdown numbers, as well as cost per contact numbers that represent best practices and show the impact of key changes.

CONTEXT FOR ANALYSIS

We'll admit this task is not a trivial one and can't match everyone's world, as so many variables with such potentially wide-ranging values exist. However, we believe the analysis results provide solid, defensible representative numbers that contact center professionals can put in their back pocket to influence tactical or strategic decision making with some true modeling-based data with clear definitions of cost elements. We don't believe this is the "end-all" for financial considerations for centers, but it can serve as a good starting point for centers to identify where to dig deeper and do more specific analysis for their environment.



TOOLS AND APPROACH

In a study like this, the modeling approach and tools are important. For each variable that changes to have an impact on the cost, the model's structure must ensure that variables drive costs. The model must ensure that linkages and components are inter-related and respond appropriately as each variable changes. We used the same approach and tools¹ in our modeling for this paper that we recommend and use with our clients: process-driven analysis. Visit the Strategic Contact website (www.strategiccontact.com) for white papers discussing the approach, value and credibility of process-driven analysis.

We built three models producing a three-year operating budget projection in each model: small contact center, medium contact center and large contact center. The following variables drive costs and can vary in each model.

- Call and email statistics²
 - Volumes (including growth rates)
 - Handle times
 - After call work
 - Abandon rate
 - Queue time
- Fixed staffing (management)
 - FTEs
 - VP
 - Managers
 - Analysts
 - Trainers/QM
 - Salaries
 - Benefits
 - Taxes
- Variable staffing (agents and supervisors)
 - FTEs (driven by work volume and productivity)
 - Call agents
 - Email agents
 - Supervisors (driven by supervisory ratio)
 - Productivity (which determines FTEs required based on projected work)
 - New employee training days
 - Ongoing training
 - Attrition
 - Absence
 - Meetings
 - Occupancy/efficiency
 - Wages
 - Benefits
 - Taxes
 - Hiring Costs

¹ Strategic Contact uses Primary Matters tool, "The Guide," in conducting process-driven analysis. Visit www.primarymatters.com.

² Given current "typical" media distribution, we used phone as the predominant media, with some email handling in the medium and large centers.



- Technology
 - Investment
 - Depreciation period
 - Tech support (fixed labor)
- Facilities
 - Space per cubicle
 - Cubicle sharing
 - Rent
 - Build-out, maintenance, utilities and upkeep
- Telecom and Networking
 - Telecom rate per minute
 - Cell phones
 - · VoIP and telephony infrastructure
- Miscellaneous overhead
 - Travel costs
 - Other overhead
 - Chargeback for services from other departments

FACTORS AND VARIABLES CONSIDERED

Variables that can impact contact center costs include industry, size, location, and number of locations. A typical financial service or healthcare contact center with five sites and hundreds (or thousands) of agents looks quite different from a small, single site, local business or non-profit's contact center. Similarly, the technology robustness, contact complexity, and labor type required and available are all significant factors in contact center cost structure. A high-tech business may have much more robust technology infrastructure and applications (and the resources to manage it) and more expensive labor needs, while a bank may be able to more readily hire affordable staff while also achieving high self-service levels.

Given all these variables, going into this analysis we recognized that we can't cover it all. So instead, we tried to set the inputs to the variables at a "likely" level based on a variety of inputs – including surveys and benchmarking studies, as well as our experience with numerous contact centers. Then, we selected the variables with the highest likelihood and greatest potential to differ, and looked at the impact of changes in those variables. As a result, we can assess some key variations, and provide some additional food for thought for those who use these results to consider challenges or changes in their centers.

FACTORS AND VARIABLES EXCLUDED

This study doesn't directly cover a few key variables. We are showing the cost of operating an existing center, not starting a new one. A start-up would have significant investments in the first year or two that would alter the cost distribution, clearly increasing the technology cost. We are also not addressing hosted technology, managed services, or outsourcing – all sourcing variations that are covered by numerous studies and white papers in the industry that seek to show their value or comparative costs. We based our analysis on an operational, inhouse center (or centers). Readers can consider sourcing variations based on the known comparative impact on budgets.

However, we would suggest caution in making too many assumptions about how alternative sourcing would alter the cost structure. It is easy to assume that offshore outsourcing, for instance, will lower costs. It certainly can lower labor costs but other costs can increase (resources to manage the relationship, technology, training, quality monitoring, etc.) by much more than expected. Therefore, overall costs might not decrease in line with the expected budget. Readers may consider the "low cost area" model discussed in this paper as representative of a lower cost outsourced labor pool.



Hosted (on demand) technology might deliver advanced features to a center that cannot afford the investment in premise solutions, but the recurring costs are generally higher and probably exceed the monthly depreciation that would hit an operating budget. The financial benefit of on-demand solutions can be eliminating the up-front cash required for investing in premise solutions and reducing the internal technical support personnel required. The functional benefit can come from having advanced features available that would typically only be affordable by larger centers. However, before assuming a financial benefit, companies should run a total-cost-of-ownership analysis over three to five years to assess true cost-saving opportunities.

KEY INPUTS FOR MODELS

There were two goals for the models: to be representative of a typical environment and therefore pertinent for all audiences, and to vary sufficiently to capture the impact of the key cost drivers in call centers. We first modeled a typical small, medium and large center to assess the cost differences based on size. We used several variables to define the size of the center. The following table shows the variables used to define a typical center in each category.

Variables/Center Size	Small	Medium	Large
Staffing	50	200	350
Number of centers	1	3	6
Annual growth	2.5%	5%	7.5%
FTEs per office	1	1.25	1.5
Media	Calls	Calls/Email	Calls/Email
Media split	100%	95%/5%	80%/20%
Self-served % of total volume	10%	10%	10%
Hours of operation	8x5	10x5 & ½ day Sat.	24x7

Additionally, we viewed technology as one of the key differences among centers of different sizes. The following table details the typical technology environment in centers based on size.

Technology/Center Size	Small	Medium	Large
VoIP PBX	Х	Х	Х
ACD	Х	X	X
СТІ		X	X
IVR	Х	X	X
ASR IVR			Х
PCs with 19" monitors	X	X	X
QM		X	X
WFM		X	Х



Within each technology category, we varied the features and therefore cost in each model based on the size of the center. For instance, the medium and large size centers use the IVR for post-call customer satisfaction surveys while the small center uses the IVR for basic prompting and limited data-directed routing. The technology investments vary based on these types of functionality differences for each technology and each center size. See the appendix for details on annual technology depreciation included in each model.

SENSITIVITY ANALYSIS

We also wanted to assess the sensitivity, within a center of a given size, to variables that drive the major cost differences among centers. We used a medium size center and changed key variables to show how the cost structure and overall costs change.

- High Self Service: We assessed the impact of using the IVR for self-service applications, which did not change the overall contact volumes but reduced the agent-handled volume.
- Low Cost Labor: We changed variables to model how the cost structure changes if the center is located in a low-cost area.
- · Complex Contacts: We modeled a center which handles extremely complex contacts such as technical support.

The following table shows how we altered the variables to reveal the costs for each sensitivity model.

Sensitivity Model	Altered Variables
High self-service	• 30% reduction in agent-handled volume (self-served volume increases from 10% to 40% of total contact volume)
Low cost labor	20% reduction in the cost of labor and facilities
	20% reduction in turnover
	• 20% reduction in hiring costs
Complex contacts	• 25% increase in handle times
	25% increase in labor rates
	• 50% increase in hiring costs
	100% increase in new employee training
	50% increase in ongoing training
	50% increase in management and supervision

KEY ASSUMPTIONS

One of the primary assumptions in the analysis concerns technology. We realize that every center varies in their technology investments and upgrades. Our approach was to model the centers including technology that, based on our experience, a center of each size would most typically have.

We also believe that technology should remain current with maintenance contracts and periodic upgrades. We therefore included depreciation, maintenance, and upgrade costs for each technology across the entire three-year projection period. This represents the continuous commitment to current technology that each center should have. In other words, the costs reflected here show best practices for technology operations and investment. The same concept applies to many of the other inputs to the models. For example, while not every center includes fully loaded costs when thinking about their labor costs, we think it is important to include all costs when considering the operational costs of a center, and key changes or decisions. Thus, as a best practice, we included fully loaded labor costs.

While altering the variables for each size model, we made several assumptions about the value of the variables and how each variable would change across the models. Following is a list of the way we changed – or didn't change – other variables for each model. See the appendix for the specific values for each variable.



Variable	Change	As
Handle time	Decreases	Centers get larger
After call work	Decreases	Centers get larger
Abandon rate	None - constant	
Average queue time	None - constant	
New employee training days	None - constant	
Ongoing training days	Increase	Centers get larger
Portion of VP's time allocated to budget	Increases	Centers get larger
VP, Managers, Tech Support salaries	Increase	Centers get larger
Number of Managers, Analysts, QM, Trainers	Increase	Centers get larger
Tech Support FTEs	Increase	Centers get larger/ have more technology
Supervisor to staff ratio	None – constant	
Supervisor and CSR wages	None - constant	
Analysts and QM wage	Decreases	Centers get larger
Benefits percentage of base pay	None - constant	
Agent absence	Increases	Centers get larger
Meeting hours per week	Decreases	Centers get larger
Agent occupancy/efficiency	Increases	Centers get larger
Telecom per minute rate	Decreases	Centers get larger
Square feet per cubicle	None - constant	
Cost per square foot	None – constant	

The appendix has the details of the inputs used in this modeling. Keep in mind that we based our chosen inputs on what we have seen working with many contact centers of varying size, sophistication, and applications, as well as a variety of survey and benchmarking data available in the market. We did not use one source, but rather considered many sources and landed on representative data for each input.

While these inputs are only representative, and any given center may have higher or lower costs or better or worse performance in various areas, we believe the results of the analysis lead to a relatively consistent cost distribution across the center. For example, a company that has higher variable labor costs also likely has higher fixed labor costs, as well as utilities and rent. Any user of the information contained in this modeling analysis can make "gut feel" adjustments in the costs or cost distribution based on how your center cost structure differs.³

CASH INVESTMENT IN TECHNOLOGY

For our analysis in this paper, we have used depreciation as the budgeted expense for technology. When do you use cash outlay for the investment in technology and when do you use depreciation?

Typically, there is a capital budget that controls cash available for investment. The CFO, CIO, Business Units or even a cross-functional team that approves funds for projects could hold this budget. The operating budget for the contact center however does not typically include the actual cash outlay for technology purchased. The purpose of depreciation is to spread the "expense" of a large cash outlay for technology over the life of the technology. This is an important distinction for the CFO in annual expense, profit and tax calculations. The distinction is not as pertinent to the contact center other than knowing which approach to use for analysis.

For the day-to-day financial management of the contact center (operating budget), centers should use the depreciated expense of technology investments. If you have technology expense in your operating budget, it would most likely be the depreciation expense. It is the same concept as the CFO assigning the contact center "charge backs" for services from other departments, such as human resources or training. Depreciation is your monthly charge for the use of the technology and is calculated as the monthly portion of the total cash investment.

When you are building business cases, including return on investment (ROI) for projects/ investments, it is absolutely essential to use the cash investment, not the depreciation. ROI by definition is the cash return on the cash investment. The goal of a business case (and ROI) is to determine how quickly the cash inflow resulting from an investment can pay back and even exceed the cash outflow from the investment. If you are figuring the three-year return on an investment depreciated over seven years and use the three-year depreciation instead of the cash flow, you would understate the outflow and overstate the return.

Bottom line: Use cash outlay for investment analysis and depreciation for operating analysis.

³ In addition, we can readily run models with variations of the inputs shown. Any company wishing to get a more specific breakdown of their cost distribution and cost per contact information can contact us for a mini-project to run your center-specific operating cost numbers. Send an email to info@strategiccontact.com or call 1-866-791-8560.



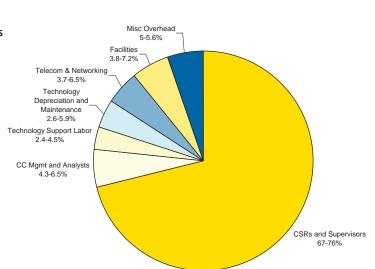
RESULTS

The pie chart on the right summarizes the breakdown of costs in the contact center, considering the variations in size, self-service rate, labor and contact complexity we modeled. While big changes in these areas could sway the percentages, this chart provides a representative overall breakdown of costs considering today's economy and "typical" configurations and operations.

What's immediately evident is the large "slice of the pie" that the frontline call center labor consumes. The other slices collectively make up approximately a quarter to a third of the cost, with no one element standing out as a large slice. The management and analysts (fixed labor) in the center, and the facilities costs, incur slightly higher percentage costs than the other elements. Collectively, the technology elements are 9–16% of the cost, including the support labor, telecommunications and networking.

COST DISTRIBUTION

The table below provides the specific cost distribution for varying center sizes.



Detailed Contact Center Cost Distribution

Includes	Small	Medium	Large
Loaded cost for CSRs and Supervisors	70.4%	72.5%	72.0%
Loaded cost for management and operational analysts	5.4%	4.4%	6.4%
Loaded cost for IT and Telecom support staff	4.5%	3.2%	2.7%
IT and Telecom technology depreciation and maintenance costs	2.6%	4.4%	5.9%
Voice network per minute, cell phones, and depreciation and support for voice and data network infrastructure across sites	4.6%	5.0%	3.9%
Rent, maintenance, utilities	7.2%	5.2%	3.8%
Travel, chargeback for other departmental services (e.g., HR, accounting), and per-person, budgeted miscellaneous expenses	5.3%	5.2%	5.3%
	Loaded cost for CSRs and Supervisors Loaded cost for management and operational analysts Loaded cost for IT and Telecom support staff IT and Telecom technology depreciation and maintenance costs Voice network per minute, cell phones, and depreciation and support for voice and data network infrastructure across sites Rent, maintenance, utilities Travel, chargeback for other departmental services (e.g., HR,	Loaded cost for CSRs and Supervisors To.4% Loaded cost for management and operational analysts 5.4% Loaded cost for IT and Telecom support staff 4.5% IT and Telecom technology depreciation and maintenance costs Voice network per minute, cell phones, and depreciation and support for voice and data network infrastructure across sites Rent, maintenance, utilities 7.2% Travel, chargeback for other departmental services (e.g., HR,	Loaded cost for CSRs and Supervisors To.4% To.4% Loaded cost for management and operational analysts 5.4% 4.4% Loaded cost for IT and Telecom support staff 4.5% 3.2% IT and Telecom technology depreciation and maintenance costs 2.6% 4.4% Voice network per minute, cell phones, and depreciation and support for voice and data network infrastructure across sites Rent, maintenance, utilities 7.2% 5.2% Travel, chargeback for other departmental services (e.g., HR,

Some of the factors do not have a linear increase/decrease as you move up in size. We explain each below:

- Variable labor Variable labor is one of the primary determinates in our definition of size for modeling. The non-linear percentage
 increase in variable labor is a function of the adjustments in other cost categories. Other costs adjust non-linearly relative to size
 causing this variable, when viewed as a percentage of total costs, to appear non-linear as a percentage when the actual costs do
 grow linearly based on size. This change is clear in the cost per contact tables below, especially with costs per contact broken into
 the detailed components.
- Fixed labor You can see from the specific variable values in the appendix that the fixed staff increase from the small to medium center is proportionately less (when compared to the variable labor increase) than the increase from medium to large. Our assumption is that as a center grows from medium to large, at some point, there is a need for a whole new and more robust approach to training/analytics/quality, etc. that will require a non-linear increase in the support staff (fixed labor).



Telecom/Networking – The move to a multi-site environment in our medium center model has an impact, causing Telecom/
Networking costs to increase as a percentage of total costs. The costs drop back down for the large center because with VoIP,
the cost as you add sites does not grow linearly with overall growth. In other words, other costs grow as a function of size more
linearly than the cost of telecom and data networking. As a result, these cost become a smaller and smaller percentage of total
costs.

As noted, we modeled key variations for the medium center to reflect higher self-service rate, lower cost area, and more complex support operations. The table below provides the specific cost distribution for these variations.

Cost Structure	Includes	Medium	Self-service	Low Cost	Complex
Variable labor	Loaded cost for CSRs and Supervisors	72.5%	66.8%	70.3%	76.3%
Fixed labor	Loaded cost for management and operational analysts	4.4%	6.5%	4.3%	5.0%
Tech support labor	Loaded cost for IT and Telecom support staff	3.2%	4.2%	3.2%	2.4%
Technology	IT and Telecom technology depreciation and maintenance costs	4.4%	5.6%	5.3%	3.3%
Telecom/Networking	Voice network per minute, cell phones, and depreciation and support for voice and data network infrastructure across sites	5.0%	6.5%	6.1%	3.7%
Facilities	Rent, maintenance, utilities	5.2%	5.3%	5.2%	4.2%
Miscellaneous overhead	Travel, chargeback for other departmental services (e.g., HR, accounting), and per-person, budgeted miscellaneous expenses	5.2%	5.0%	5.6%	5.1%

COST PER CONTACT

The following table shows the cost per contact in two different views. The fully-loaded cost includes the total contact center costs as described throughout this paper. It does not simply include those costs typically part of the contact center budget. Narrowly focusing on only the costs in the contact center budget can mislead analysis and lead to poor decisions on investments and process change, particularly when considering not just the impact on the center, but the enterprise view of what is best for the company. The labor budget costs include only those costs typically considered in this metric: all contact center labor. This table reveals the impact of including all costs and also how overall costs change based on center size and based on the "sensitivities" to our key variables: higher self service, low cost area and complex issue support.

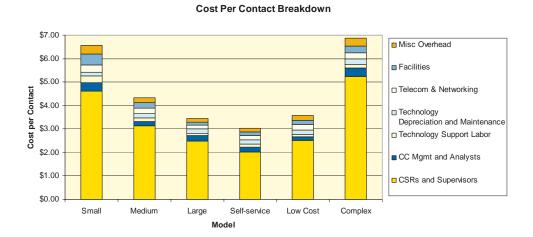
					Medium	
Cost per Contact	Small	Medium	Large	Self-Service	Low Cost	Complex
Fully-loaded cost per contact	\$6.55	\$4.33	\$3.47	\$3.04	\$3.57	\$6.88
Labor budget cost per contact	\$4.97	\$3.33	\$2.72	\$2.23	\$2.67	\$5.59



In the following tables, we break out the cost per contact into the components of that cost. This gives a good indication of how the overall budget and each budget element changes in each model. More importantly, this table shows how much the overall budget and the ultimate cost per contact can change with focus on cost reduction in any given area.

					Medium	
Cost per Contact Component	Small	Medium	Large	Self-Service	Low Cost	Complex
Variable labor	4.61	3.14	2.50	2.03	2.51	5.25
Fixed labor	0.36	0.19	0.22	0.20	0.15	0.34
Tech support labor	0.29	0.14	0.09	0.13	0.11	0.17
Technology	0.17	0.19	0.20	0.17	0.19	0.23
Telecom and networking	0.30	0.22	0.14	0.20	0.22	0.25
Facilities	0.47	0.23	0.13	0.16	0.19	0.29
Miscellaneous overhead	0.35	0.23	0.18	0.15	0.20	0.35
Fully-loaded cost per contact	\$6.55	\$4.33	\$3.47	\$3.04	\$3.57	\$6.88

The stacked bar chart below presents a visual depiction of these various models and the breakdown of the costs.



The call center labor budget cost per contact is a sub-set of the previous table.

					Medium	
Cost per Contact Component	Small	Medium	Large	Self-Service	Low Cost	Complex
Variable labor	4.61	3.14	2.50	2.03	2.51	5.25
Fixed labor	0.36	0.19	0.22	0.20	0.15	0.34
Labor budget cost per contact	\$4.97	\$3.33	\$2.72	\$2.23	\$2.67	\$5.59



WHAT THE RESULTS TELL US

While we hope it's valuable for people to consider the raw results of this analysis, we also want to take a step back and ask, "What do these results tell us in the context of the decisions contact centers and companies have to make every day about where to invest, the changes they are considering, and ways to improve their operations?" Combining the analysis results with what we see companies struggle with routinely, we make the following observations:

- Focusing on front-line labor productivity is in fact the right thing to do; it is 90% of the contact center labor budget, and two-thirds to three-fourths of the overall operating budget. The numbers are compelling. Finding ways to get more bang for your labor buck just makes sense.
- Technology costs, while they may seem large when faced with a vendor quote, are a relatively small slice of the pie (2.6–5.9%). Investing in technology to make the workforce more efficient can have a profound and lasting impact. As a relatively small part of the overall operating budget, technology can have a big impact on the expensive labor part. This result is not just from improving self service, but optimizing contact handling times and other improvements that let you handle more contacts with the same number of people, or the same number of contacts with a reduced labor cost. And other savings (tied to the number of people required, and all their associated costs) can offset that technology investment.
- If possible, consider a long-term view, not just the short-term, tactical view. Too often, we see centers making short-term decisions to meet a budget goal that compromise the desired long-term benefit. For example, analyst resources have a relatively low cost, and are often critical to getting the value out of the technology implemented. Centers that don't make (or cut) that investment for short term needs miss out on the chance to have a significant impact on the large budget element of contact center front-line labor.
- Centers considering virtualization have a compelling cost opportunity if it takes you from several small or medium centers to one
 larger virtual center a 20–50% reduction in cost per contact in our analysis. The cost per contact drops considerably as you
 gain the efficiencies larger centers offer, while doing more in terms of the services offered through technology and using shared
 services for technology and analyst functions. An enterprise view is critical.
- The range of the labor cost is not as varied as perhaps we previously thought, and regardless, it is a big percent. But as you make changes, keep in mind this is a big ship that will take time to turn. Strategic decisions, changes, and investments have to be given time to make their impact.
- Looking at an "apples to apples" comparison of costs across different scenarios, the allocation of costs does not vary tremendously. There is no one right way to allocate costs, but it is important to recognize the difference between total cost (reflected in our analysis) and limited costs such as non-loaded labor and other corporate costs (technology, facilities, etc.) not being allocated to the center. While the call center may focus on its budget (generally labor), considering overall costs can lead to the best decisions for the corporation.
- When analyzing alternatives such as outsourcing or hosted solutions, companies should consider the total costs, as this analysis does. While a labor cost reduction can have an impact (as shown in our lower cost area model), that model showed the cost impact with all other things being equal. Consider the impact on other areas, such as fixed labor, telecommunications, technology, training and quality assurance when considering alternative sourcing options. That is the only way to look at the true impact on cost per contact.
- The percent breakdown shows where to target for improvements: clearly labor is the biggest target. However, evaluate cost per
 contact to look at how you can improve your overall budget. For instance, our examples of improving self service and decreasing
 labor costs have a nearly direct impact on overall cost per contact.

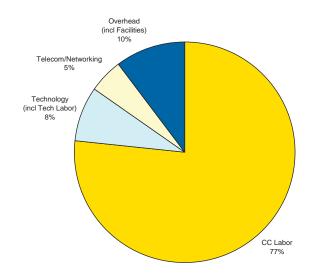


CONCLUSIONS

The graphic on the right is a simple way to look at the cost allocations across a center, considering all operating costs. We've condensed the more detailed numbers, and provided an average across our models. Call center labor (a typical budget line item, including front-line CSRs and supervisors, and management and analysts), technology (including both the technology depreciation and maintenance, and the staff to support it), telecommunications (toll-free numbers and services), and other overhead is the simplest breakdown to consider how running a center consumes corporate budget dollars.

As centers move forward with planning and decision making to meet their corporate goals, it is important to consider the potential cost impact. Armed with more knowledge about the distribution of these costs and what contributes to overall cost per contact, we hope that centers can make the best decisions to optimize their operations.

(Condensed, Averaged) Contact Center Cost Distribution



APPENDIX - INPUT INFORMATION

The tables below provide the details of the inputs we used in conducting this modeling.

Our goal in these models is not to benchmark the value of these variables based on your center size. These values are, based on our research, representative of each center size as defined. We then completed additional models that altered the variables that we believe would have the most impact on cost structure and that would, again, represent the major differences in the real world from our standard size-based models. There is certainly value in understanding your specific cost structure and having a baseline understanding of your costs. Then you can build any analysis upon that baseline for more credible results. Strategic Contact offers this cost modeling service. Send an email to info@strategiccontact.com or call 1-866-791-8560 if you are interested.

ANNUAL TOTAL COST OF OWNERSHIP INCLUDED IN EACH MODEL

Technology/Center Size	Small	Medium	Large
VoIP PBX/ACD	\$23.8	\$227.5	\$821.5
СТІ		\$48.9	\$177.6
IVR	\$21.1	\$23.8	\$50.0
ASR IVR			\$36.3
PCs with 19" monitors	\$39.0	\$124.8	\$283.1
QM		\$129.0	\$253.0
WFM		\$53.5	\$107.3
VoIP and Converged Networks	\$52.2	\$264.3	\$414.5

(Depreciation, Maintenance and Support) (\$000s)



VARIABLE VALUES FOR EACH MODE	L				Medium	
Variable	Small	Medium	Large	Higher Self-Service	Lower Cost/Area	More Complex Contacts
Call talk time	325 sec.	275 sec.	250 sec.	275 sec.	275 sec.	344 sec.
After call work	100 sec.	75 sec.	50 sec.	75 sec.	75 sec.	94 sec.
IVR time to completion	240 sec.	240 sec.	240 sec.	240 sec.	240 sec.	240 sec.
Abandon rate	5%	5%	5%	5%	5%	5%
Average queue time	45 sec	45 sec	45 sec	45 sec	45 sec	45 sec
Email handle time	N/A	240 sec.	200 sec.	240 sec.	240 sec.	300 sec.
New employee training days	10	10	10	10	10	20
Ongoing training days per year	5	7	10	7	7	10.5
VP	.5	.75	1	.75	.75	.75
VP salary	\$75,000	\$80,000	\$85,000	\$80,000	\$64,000	\$100,000
Managers	1	3	10	3	3	4.5
Manager salary	\$60,000	\$65,000	\$70,000	\$65,000	\$52,000	\$81,250
Supervisory ratio	1:15	1:15	1:15	1:15	1:15	1:10
Sup hourly rate	\$19	\$19	\$19	\$19	\$15.20	\$23.75

					Medium		
Variable	Small	Mediun	n Large	Higher Self-Service	Lower Cost/Area	More Complex Contacts	
Analysts	.5	3	10	3	3	4.5	
Analyst salary	\$21	\$19	\$17	\$19	\$15.20	\$23.75	
Trainers/QM	.5	3	10	3	3	4.5	
Trainer/QM salary	\$21	\$19	\$17	\$19	\$15.20	\$23.75	
Tech admin support	Based on tech	Based on tech	Based on tech	Based on tech	Based on tech	Based on tech	
Tech admin salary	\$60,000	\$65,000	\$70,000	\$65,000	\$52,000	\$65,000	
Agent hourly rate	\$15	\$15	\$15	\$15	\$12	\$18.75	
Benefits %	15%	15%	15%	15%	15%	15%	
Agent attrition	25%	30%	35%	30%	24%	30%	
Agent absence	10%	12%	14%	12%	12%	12%	
Meetings (hrs/wk)	1.9	1.7	1.5	1.7	1.7	1.7	
Agent occupancy (efficiency)	65%	80%	85%	80%	80%	80%	
Telecom cost	.030	.025	.020	.025	.025	.025	
Office space per cubicle	100 sq. ft.	100 sq. ft.	100 sq. ft.	100 sq. ft.	100 sq. ft.	100 sq. ft.	
Cost per sq. ft per month	\$2.00	\$2.00	\$2.00	\$2.00	\$1.60	\$2.00	
Chargeback for services % of Variable Labor Budget 5%		5%	5%	5%	5%	5%	
Hiring costs per new hire	\$1,000	\$1,000	\$1,000	\$1,000	\$800	\$1,500	
Annual misc. expense per person	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
Annual travel costs per VP	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	
Annual travel costs per Manager	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	
Annual travel costs per Sup/Trainer/QM/Ana	lyst \$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	
Annual cell phone expense per VP/Manager	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	\$1,200	
Monthly utilities	\$3,000	\$7,000	\$13,000	\$7,000	\$7,000	\$7,000	