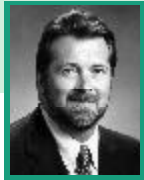


Reengineering Customer Support

Part I: Eight Key Indicators That Your Organization Requires Reengineering



Dave Brown is a management consultant, teacher, and writer. Dave teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world-class service operations and is considered an expert in the areas of process improvement, staffing models, and change management. You may reach Dave at his office in Boulder, Colorado, at 303-494-4932 or dave.brown@SupportCenterU.com.

***Editor's Note:** Stay tuned this year for Dave's insight on the topic of "Reengineering Customer Support" via a new column series. Dave's expertise in customer support is unmatched, so if you're in the industry, you'll want to turn to his pages.*

Reengineering is not a simple, easy process that every company should perform. It is an intense, complex, and often painful journey. However, the result can be a quantum-leap improvement in service levels, service quality, and a coinciding improvement in efficiency that reduces operating expenses. This type of dramatic improvement only can come from equally dramatic change. However, change can be very difficult, and not every organization is capable of surviving the stress of reengineering—nor does every organization need the complete makeover that is reengineering. Therefore, each

company should consider their situation carefully and weigh the potential benefits vs. the effort and cost before embarking on reengineering.

What Is Reengineering, and Why Do Companies Do It?

First, let's be clear on what reengineering is...and what it isn't. Reengineering means completely rethinking the work processes. It means starting with a blank slate and designing new processes that will achieve the desired goal in the most efficient manner possible. *Reengineering* is a term that emerged in the late 1980s/early 1990s, when many companies on the brink of failure used reengineering to reinvent themselves—in order to survive. It became so popular that many companies embarked upon poorly planned and poorly managed reengineering efforts, seeking those quantum-leap improvements. The result was a high rate of failure, and reengineering got a bad

reputation as a result.

But reengineering has been making a comeback, and it is no longer just a survival tool for companies that are in trouble. In fact, companies that reengineer while in a positive growth mode may experience several benefits. By becoming more efficient, they can slow the hiring frenzy and reduce costs. Customers typically receive better service and are more satisfied. And employees often find that reengineered work is more satisfying and less stressful, which improves productivity and reduces turnover. Reengineering is good business.

Reengineering is what many support organizations require to achieve their goals. For the purpose of this discussion, it doesn't matter whether you have a general goal, such as to become world-class, or well-defined objectives, such as to deliver specific, high levels of service to your customers at a reasonable (and also well-defined) expense to the company. The issue for many is that they never will be successful until they stop patching the old process and design a clean, new process. While many companies try to make improvements through incremental adjustments, the processes often are so broken or require such radical changes that incremental adjustments do not deliver satisfactory improvement. In fact, when a company's process model is so broken as to require reengineering, it is common to see them continually pouring money into improvement efforts that deliver minimal results.

Is the need to reengineer a sign that a company has done something wrong or made a mistake? Not necessarily. Most companies require reengineering after they have experienced a period of substantial growth and the processes and tools did not keep pace with that

growth. This could be long, slow growth or overnight success. It doesn't matter. They've simply outgrown processes that once worked fine.

When the evolution of a support organization does not keep pace with the rest of the company, it doesn't take long before support is too far behind to catch up through normal, incremental improvement efforts. When a company's market expansion, sales levels, new product introductions, and other key business functions have grown at a rate substantially greater than the evolution of the support organization, you have a situation that likely can benefit from reengineering.

Please note that I said the *evolution* of the support organization, not the *growth*. There's an important distinction, because an organization that grows without evolving probably is becoming less and less efficient. That problem typically manifests itself as a support organization growing at a rate faster than the rest of the company, while service levels or customer satisfaction levels decline.

As companies grow, their support operations become more complex. New products, new modules, and multiple revisions in use by the customer base are just a few of the factors that add complexity to the job of providing customer support. The processes that worked fine when the company was smaller typically are not adequate as the company grows. A support operation must adapt constantly, or it eventually will become obsolete.

Many companies observe the symptoms of a support organization in trouble and then attempt to repair it through a series of fixes, e.g., reorganizations, restructurings, outsourcing, new call-tracking tools, knowledge management tools, charge-for-support

programs, and other efforts to "stop the bleeding." However, treating symptoms doesn't cure the ailment. Patching doesn't solve the fundamental problem. You must identify and repair the root cause.

Eight Key Indicators

It generally doesn't require an in-depth analysis to determine that an organization is broken enough to require a major overhaul. The in-depth analysis is actually Step 2 and will confirm the initial prognosis. (Note: That's the next column in this series.) The key indicators, or symptoms, usually are easy to identify. The following are questions to consider when determining whether your organization requires and can benefit from reengineering.

- 1. Are customers "going around" the process?** Are they calling in on the direct dial number of support engineers or asking for specific people? Are they using e-mail to contact a support engineer directly rather than calling in and following the standard process? Are they trying to bypass or circumvent the process in some other way? If so, these are clear signs that the existing process does not meet the customers' expectations. If a process works (i.e., provides a level of service that meets customer needs), then customers generally will be satisfied and adhere to the process. But when the process isn't working, you'll hear complaints and/or you'll notice many instances in which customers are going around the process to get what they want.
- 2. Are customers seriously dissatisfied with the speed and/or quality of service?** You don't need to necessarily perform a formal customer satisfaction survey in order to determine if a problem exists. If customers are unhappy, they usually will let you know.

Do the CEO and other senior managers get frequent complaints? Do complaints outnumber compliments? Does line management spend a significant portion of their time dealing with “hot sites,” irate callers, or other forms of customer dissatisfaction? Have you developed a special process for handling complaints or employed a person specifically for following up on complaints? If the answer to any of these questions is yes, you have a major issue that likely is impacting customer loyalty, which in turn impacts company revenue and profitability.

3. Are your employees satisfied? If the process isn't smooth, it creates a situation where it's difficult for people to be successful. Most people want to do their jobs well, and a poor process will frustrate them. People don't like working in frustrating, unrewarding, or stressful situations. A poor process therefore results in low moral and high turnover. Also, it's difficult for people who feel this way about their jobs to provide good levels of customer service. While good people will try hard, their frustration and inability to get the job done efficiently eventually will filter through to customers. If you want to know what your customer satisfaction level will be six months from now, measure your employee satisfaction today.

4. Are there observable flaws in the current process? Does each step of the process add value? Organizations often include steps in their processes that really don't add value. One of the most common is a dispatch or other front-end group that takes a call, collects some information, logs the case, and then routes the call. What is their purpose? What value do they add from the customer's perspective? Usually, they serve only as a buffer for the

support engineers (who don't want to take calls live) or as a mechanism to avoid having customers on hold waiting for an available engineer. If these people aren't part of the problem resolution process; that is, if they don't have some likelihood of resolving the issue, then they probably are an unnecessary step.

Another common flaw is sorting calls into many small groups. The intent is to get the call to the expert and improve the resolve rate. However, this can result in overstaffing and/or poor response times (long hold times) due to the inherent inefficiency of this model. Reengineering can correct these process flaws by delivering better service at a reduced cost.

5. Do you have a “one size fits all” support model? Most companies have a variety of customer types with a variety of needs. If all customers are required to be serviced in the same way, many will be dissatisfied. Some customers demand higher levels of service and are willing to pay for it. Other customers are more self-sufficient and simply want tools or access to information. If you have only one service program, you probably are missing revenue opportunities with some customers and irritating others.

6. Has the organization been trying to use technology to improve service levels? Technology is a great enabler, and many process improvements require new technology. However, technology on top of existing processes generally provides only incremental improvement (if any). When I see an organization spending large sums of money to add lots of automation, I usually find that they really need to look at the core process model. When you automate a poor process model, you may achieve some improvement. Unfortu-

nately, you miss the bigger improvement opportunity that comes from reengineering the process and using technology to enable that new process.

7. Does the headcount match the workload (and performance)? There are a number of methods for estimating the required headcount for a given amount of work, including workforce management software products. If you drop an organization's workload into one of these tools, and it determines that the required staffing is substantially less than is currently being applied, there is an opportunity. Or if the current staffing should be capable of delivering great service, but it isn't, then there is an opportunity.

8. Do the operational metrics stack up against industry benchmarks? Are they within the “normal” range? If any key metric seems inappropriate, a problem likely exists. When two or more metrics are out of range, it means you need to drill down and identify the problem. It's very important to understand that operational metrics, like most of what I've described in the previous paragraphs, are symptoms and are not the real problems. You don't fix poor performance metrics; you must fix the underlying cause.

When you know what to look for, the signs are observed easily. When you notice symptoms, you must suspect problems. A single problem can manifest itself as multiple symptoms. Keep in mind, however, that a single symptom can mean several different things...so don't make assumptions! You must identify the root cause.

Conclusion

If all of the telltale signs are apparent, even if there appears to be a major

opportunity for the company to benefit from reengineering, another step is required. Before launching a reengineering project, a company always should perform a thorough operational assessment. The operational assessment validates (or nullifies) the initial hypothesis. It determines the root causes of the identified problems, estimates the level of effort required to correct those problems, and then predicts the benefits and ROI. No company should embark on a reengineering effort if they haven't done this preliminary cost/benefit analysis. Please look for the next installment on this series, which will discuss how to perform a thorough operational assessment. ▼

Reengineering Customer Support

Part 2: Performing a Thorough Operational Assessment



Dave Brown is a management consultant, teacher, and writer. He teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world-class services operations and is considered an expert in the areas of process improvement, staffing models, and change management. You may reach Dave at his office in Boulder, Colorado, at 303-494-4932 or dave.brown@SupportCenterU.com.

Performing an operational assessment is much like going to the doctor for a full physical exam. There are many reasons why you might decide to go for a physical or perform an assessment on your operation, but this column will focus on how to perform an in-depth analysis once you have observed the symptoms that your organization may require reengineering, which were discussed in Part One of this series. Once you have determined that your organization may benefit from reengineering efforts, the next step is to perform an operational assessment.

An operational assessment is designed to provide management with an analysis of the current operation, with a focus on identifying and quantifying opportunities for improvement. The idea is to drill down on those areas identified as key concerns and/or opportunities. The operational assessment also is used to benchmark the current state vs. the desired state and to determine if an organization should engage in incremental improvement efforts or embark on a full-scale reengineering project.

Even if the telltale signs are apparent and there appears to be an opportunity to benefit significantly from a reengineering effort, the assessment

step is still required. The purpose of the operational assessment is to validate the initial hypothesis, determine or confirm the root causes of the identified problems, and predict the benefits of correcting the problems. In other words, the assessment should make clear what is to be fixed or changed, and it will provide an up-front understanding of the expected outcome. No company should begin a reengineering effort if they haven't done a thorough assessment, including a preliminary cost/benefit analysis.

General Approach

A proper assessment will include a thorough review of processes, people, and tools. It will provide an objective review of department policies, procedures, methods, and results. The current department metrics must be reviewed and benchmarked against industry averages and trends. The tools in place to support the processes, such as phone/ACD systems, call tracking, knowledge management systems, self-service, e-service, and other automation, must be reviewed. The organizational structure and management capabilities also can be assessed. In other words, all aspects of the services operation must be reviewed thoroughly,

and then opportunities for improvement can be identified.

A good operational assessment will progress through several stages, which include interviews, observations, data collection and analysis, development of alternatives, and the final recommendations. The resulting report should identify problems, recommend solutions, and outline a plan for improvement. From my experience, the assessment process generally takes at least 30 days (for a single site), and it can take significantly longer for multisite or more complex operations.

Some companies, particularly larger corporations, may have their own process improvement department and therefore can perform an effective self-assessment. However, some companies find that bringing in an outside consultant ensures that they are getting a true expert and that there is no bias or personal agenda that may taint the results. The recommendations in this column can be applied to either scenario, and you can assume the references to “assessor” or “consultant” could be an internal person.

Stage #1: Interviews

The assessment process typically begins with a series of interviews. In fact, the information gathered during the interview stage is the foundation for the ensuing activities. The purpose of the interviews is to gather perspectives regarding what is working and what isn't. A skilled interviewer also can learn a tremendous amount about the current and potential processes during these initial interviews. The assessor will begin to establish points to be validated or refuted in the later stages.

The interview stage should be conducted with executive management (i.e., the president, the chief executive

officer, and other senior executives), customer service/support management (from the director or vice president down to the first-level supervisor), front-line customer service providers and “stakeholders” (such as sales and product development), channel partners (if applicable), and customers. Each of these categories is important, and each provides a different perspective.

The interviews should begin with a few of the top executives. The information gathered from these initial interviews will influence the direction of the assessment. There are three areas for discussion with the senior executives.

First, it's important that you understand the strategy. Where does customer support “fit” in the corporate strategy? Is part of the strategy to differentiate the company by providing “legendary” customer service? Is part of the strategy to cultivate very loyal, long-term customers? Is the strategy to maximize revenue derived from services? Or is the strategy to minimize the cost of services while providing an “acceptable” level of service? The answer to these questions will determine the “bar” by which the current operation will be evaluated.

The second area for discussion with the senior executives is the future state or vision. If the executive could wave a wand and transform service exactly the way he wants it, what would it look like? How would customers get service? Would they call on the telephone or come in over the Web? Would they come directly to the company or would they call a reseller? Would they have options for self-service? What would the service level be (i.e., speed of answer)? What would the financial profile look like (i.e., profit/loss or expense)? Again, the answers to these questions will shape the assessment.

The third area of questioning should focus on observed symptoms or concerns about current performance. From the senior executives' perspective, what isn't working? Are costs too high, or are revenues too low? Do they receive too many complaints, or are customers rating service quality too low on surveys? What does the CEO think needs to be fixed?

The second set of interviews should be conducted with the functional management and begin the drill-down. I define “functional management” as the most senior manager in the services organization (typically the vice president or director) and all of the levels of management below that. It's important to understand the linkages and the gaps between the interview results of functional management and the executive staff. To establish this, questions should be asked regarding the understanding of the strategy and desired future state, as well as questions regarding current operating performance. These questions are intended to gain an understanding of current and potential performance.

For example, you might ask how often a caller actually reaches the “right” agent on the initial call. You also could ask what percentage of calls are solved on the first contact, and what percentage of calls *could* be answered on the initial call if the right agent received the call. The answers to these questions will help to assemble a picture of current performance and potential performance.

Another series of questions for the functional management should focus on the current processes, tools, and staff. How satisfied are they with the way things are now? What tools help them, and what tools do they feel *could* help them? Are there roadblocks or hurdles—

issues that frustrate them and keep them from being successful? In addition to gathering key data, you should be looking for consistency (or lack of) between the higher-level corporate management goals and the performance measures applied to the front line.

The interviews conducted with stakeholders, customers, and channel partners are similar to one another. All of these groups are outside of the process, yet they have a high stake in the outcome and typically have a heavy influence on the service level targets. The interviews primarily should collect information regarding expectations and level of satisfaction with results. Information also should be collected regarding concerns and frustrations, as well as any additional observations they may care to share. If weaknesses are observed in the operation and the belief is that the organization is not providing an acceptable level of service, this would be an opportunity to confirm that the weakness is resulting in dissatisfaction (for either customers or stakeholders).

The interview process is iterative. For instance, it is extremely likely that customers will communicate information that you will need to go back to management to validate. It's also likely that later stages (such as observations or data collection) will produce information that was not known during the initial interviews. Therefore, a series of follow-up interviews are normally part of the assessment process.

Stage #2: Observations

I always find the observation portion of the assessment very interesting. The purpose of the observations is several-fold. First, you either want to validate (prove) or invalidate (disprove) information that you have collected or hy-

potheses that you have developed. Second, through observations, you want to collect information that cannot be gathered easily by any other means, as I'll discuss below. Furthermore, these observations can be divided into two categories: department or general observations and individual worker observations.

The observations related to individuals are not intended to measure a particular individual's capability, but rather to understand how well equipped these people are to do their jobs. For example, do they receive calls regarding products or issues that they have been trained to handle properly? Is the customer information system easy to use, and does it provide them with the information they need to service the customer?

I typically like to spend one hour each with several different people in order to get a rounded perspective. I may sit in their cubicle with a headset on, but I ask them to ignore me as much as possible. I typically document the type of customer calling, the reason for the call, and the length of the call. I also note what the agent does during the call (such as look up the customer record) and how they do it (such as doing a

search for the customer identification number). I may notice opportunities for automation, such as having the customer enter their own identification number on the phone and using computer telephony integration to deliver the call to the agent along with the customer record (screen pops). I may notice that people rarely use the system, instead tending to handwritten notes, which may lead me to find that the system is so slow that people avoid using it. I may find that management's edict that "everything gets entered into the knowledgebase" has filled it with so much unnecessary information that people can't find the information they're looking for...so they rarely use it.

Let me give you an example of a general or departmental observation. One of the first clients I worked with had asked for an assessment of their situation. They were having difficulty keeping up with the success of their product sales. The phone lines were so busy that customers were getting busy signals about 50 percent of the day, and once you got through, hold times were typically 30 to 45 minutes. They had about 30 people in the support organization who all were

working 10-hour days. I asked my client how many hours per day were being spent on the phones vs. following up and tending to other work. The director of support told me that everyone was on the phones “all day.” Things were so awry that they had eliminated all of the other activities, and everyone was on the phones all day. Interviews with agents confirmed the director’s view. But all of this didn’t add up for me. My calculations indicated that there should have been more than enough people to handle the workload. Well, that director of support was very surprised when I told him that at any given point in the day, there were typically between five and 10 people actually on the phones with customers. Another group was around, but doing other things. And about one-third were nowhere to be found. Once the real problem was identified, it was relatively easy to resolve. The key point is that only through observation were we able to explain the discrepancy between my calculations and his results.

Conclusion

This column has described the first stages of performing an operational assessment—the on-site portion that involves mostly interviews and observations. I consider this to be the fun part; the next part is where it can get tough—data collection, benchmarking, analysis, and the development of a plan for improvement. In the next installment on this series, I’ll discuss the best approach for performing these next stages. I also will describe the contents of a good assessment report—what you should expect and demand from your consultant. ▼

Reengineering Customer Support

Part 3: Completing the Operational Assessment



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Before reading this column, it is important that you've read or have access to Part 1 and Part 2 of this series, because this installment will describe the final stages in performing a thorough operational assessment. Following the steps in this column alone could result in an incomplete and ineffective assessment. However, combined with the steps described in the previous installments, you will be equipped with my entire recommendation for a thorough operational assessment.

In Part 2 of this series, I described the interview process (Stage 1) and recommended using a top-down approach. I then discussed observations (Stage 2) and provided examples of what to look for. Assuming that you've worked through these stages, you probably have a few ideas—your hypotheses regarding symptoms and causes. It is important to keep these thoughts in mind as you continue to drill down.

Stage #3: Data Collection

The data collection stage is fairly straightforward. The assessor should collect as much data as possible about the current workload and performance. This includes phone, e-mail, and Web reports, reports from the CRM or call tracking system, customer satisfaction

survey results, and any other data that may be available. Other such data includes management status reports, performance charts, or any similar compilations. Any information that can be used to determine the amount of workload, level of effort, elapsed processing time, or performance results is information that is worth collecting.

I'll get into more detail about analysis in Stage 4, but the prime thing the assessor should be looking for in data is either validation or contradiction of the information that was gathered during the interviews and observations.

For example, if the phone reports validate the agents' estimate of average handle time (gathered during the interviews), then you could consider this data validated. However, if the phone report contradicts the estimated handle time, you need to research further and resolve the discrepancy. Sometimes these discrepancies lead to the root cause of a problem. For example, further research may uncover that the phone system only captures and reports the actual talk time and not the several minutes of follow-up time per call. This could lead to a determination that the entire staffing model, based on the phone reports, is flawed and therefore is resulting in constant understaffing,

which in turn results in long hold times, high abandon rates, and customer dissatisfaction. This is easy enough to fix, but first you must identify the cause of the problem.

Stage #4: Analysis

Analysis is the difficult stage. In most assessment situations, there are mountains of information gathered through the interviews, observations, and data collection. I have a few key tactics that I apply to help me sift through the information and expose key nuggets of knowledge. One of the most valuable approaches is mapping the current process. I've found that very few companies actually have mapped their existing processes, and if they have, it probably is at too high a level to uncover any flaws, and more often than not, the *actual* process is different from management's view of the process. Simply flowcharting the actual process allows you to see redundant and/or unnecessary steps and other flaws. When you add data to the flow diagram, such as the level of effort and the elapsed time that coincides with each step, the opportunities for improvement often become evident.

Another aspect of the analysis is compiling department metrics and comparing current performance with industry benchmarks. Any significant gap must be traced back to the cause. For example, if speed of answer is three to five minutes vs. less than one minute for "world-class" companies, you need to determine why the gap exists. Is the process designed this way (design flaw), is there no mechanism to adjust for daily staff absences (poor scheduling process or lack of a workforce management tool), or is there no mechanism for monitoring hourly call-volume fluctuation and making real-time ad-

justments (lack of a workforce management tool or poor management)? Could it be that calls are not routed to the most appropriate agent, so handle times are longer than necessary, which therefore affects the response time? The observed problem, which is poor response time in this example, must be traced back to the cause.

Therefore, one goal of the analysis is to determine the root cause of problems. First, you need to determine if something is a symptom or the problem. A symptom is caused by something else and can be corrected by fixing that which is causing it. The key is asking why. Why is this happening? If you can answer this question, you are observing a symptom, not the problem. For instance, a high rate of abandoned calls is a "symptom" because it is caused by something else. You don't solve the abandoned call problem; you solve the problem that is causing the abandoned calls, and the abandoned call "symptom" is "cured."

You might have a symptom that is also a problem. For instance, the abandon call rate may be caused by long hold times. The long hold times are causing the abandoned calls. But the long hold times may be a symptom of short staffing. You may have to work back through several steps in order to identify the "root cause"—the problem that is at the root of the issue and isn't a symptom of something else. Identifying the root cause is required to truly solve a problem. You don't cure an illness by treating the symptoms, and you can't optimize a support operation until you understand the real problem.

Stage #5: Determine Options and Estimate Benefits

Once the root causes of various issues have been determined, the potential

solutions usually are relatively clear. In most cases, there are only a couple of options that will address an issue completely. However, it is typical for a support operation to be struggling as a result of multiple issues, and therefore, the complete solution may include several different components. Depending on the situation, the solution could include specific changes to the work processes that will improve efficiency and effectiveness. The solution also could include adding or improving automation tools that will reduce calls and/or agent intervention (e.g., Web self-service) or reduce handling time (e.g., improving the knowledgebase), thereby increasing the organization's capacity and improving overall service levels.

The approach that I prefer is to predict how the operation might look if these root causes were addressed. I call this the "future state." Using this method, you must have resolved the problems, and then you "model" how things will be. For instance, from a customer's standpoint, how will the service process work? Will the customer call, e-mail, or go to the Web first? If they have options, what percent of customers are likely to go down each path (based on industry research)? You can model each of these paths and describe how they will work and how long each step will take (again using industry research or examples from companies that already use the process). The result should be a hypothetical support model, complete with estimated service levels and estimated operating costs.

It is likely that you will need to consider several possible solutions and/or combinations. This means creating several models (potential future-state designs). Each variation should include the estimated cost of operating

or the difference between current and projected costs. It then will be the consultant's job to make a recommendation, and the client's job will be to decide which model is the right target for the reengineering effort.

Stage #6: Make a Recommendation

The previous stages are all designed to result in a recommendation. Depending on the purpose of the assessment and the situation, the recommendations could be very high-level: "Implement a Web-based, self-service capability integrated with a knowledgebase in order to meet customer expectations, reduce support center workload, and increase productivity." Even this high-level recommendation should include an estimated ROI. However, if the situation calls for a reengineering effort, a reasonably detailed description and justification of the recommendation should be provided.

A recommendation to reengineer should begin with a thorough description of the problem, including the root cause analysis. The recommendation also should include a definition of the future state—what the operation could or should look like if it were optimized. The difference between the current state and the future state is essentially the reason for reengineering. A small gap between these two states would indicate that incremental improvement is a reasonable approach. However, a large gap likely would mean that you can't get there through small steps, and a major overhaul may be the only realistic way to achieve the goal.

The future state or preferred model typically cannot be defined exactly at this point in the process. This is because we have not reengineered yet. By definition, you won't know the exact

outcome until you go through the reengineering process. However, you should be able to "frame" the model (as described in the previous step)—describe the basic call flow, describe the call-handling process, predict the level of staffing required based on estimated call/process-handling times, and estimate the service levels based on workload and staffing levels (using software modeling tools). Based on these calculations, you should be able to estimate the new operating costs. While much of the detail will be determined during the actual reengineering project, management should be able to get an adequately detailed vision of the outcome.

The cost of going from current state to future state is also something that can be estimated with reasonable accuracy. Many companies will use an experienced consultant to guide them through the process, and any associated fees can be defined in advance. An experienced consultant will be able to accurately estimate the level of effort required from your staff, including the number of people, hours (or percent of their time) dedicated to the project, and the project timeline (which we will address in my column in the July/Au-

gust issue). The assessment also should uncover whether the existing tools are adequate or if replacements or additions are required. Any training, facilities modifications, or other expenses also can be estimated. These only will be estimates, but I've found that it is not too difficult to develop these estimates and to have them be accurate within five to 10 percent.

So with a good understanding of the current state (symptoms and causes), a vision of the end result of the reengineering effort (future state), and an estimated cost to achieve the future state, it is relatively straightforward to develop the ROI. In my view, the assessment report also should include a "roadmap" or preliminary project plan that describes the major tasks required to transition to the recommended model. Along with the ROI, the roadmap (which includes a timeline) should provide management with the information they need to make an informed decision regarding the recommendation.

Summary

Performing an operational assessment every one to two years is a good idea for all support operations. Like an an-

evolutions in the customer support center

nual physical exam, the assessment can identify problems in the early stages, before they become overwhelming. The operational assessment also is required when serious symptoms are observed or when you are considering a major initiative, such as reengineering or outsourcing.

The operational assessment must be objective and thorough. The most efficient approach is to begin by developing a hypothesis and then following the stages to prove or disprove it. The process is typically iterative and begins with interviews, observations, and data collection. Finally, you conduct the analysis and make recommendations. A proven methodology, combined with a qualified, unbiased assessor, can provide a rounded and comprehensive view. An assessment always should estimate the ROI of implementing the recommendations.

In my next column, I'll describe one effective methodology for tackling reengineering—a field-tested technique that builds staff acceptance while adapting to your environment and culture. This is a unique approach that can improve your odds for success. ▼

Reengineering Customer Support

Part 4: Launching the Project



Dave Brown is a management consultant, teacher, and writer. He teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world-class service operations and is considered an expert in the areas of process improvement, staffing models, and change management. You may reach Dave at his office in Boulder, Colorado, at 303-494-4932 or dave.brown@SupportCenterU.com.

In the first three parts of this series, we identified the eight key indicators that your organization may require reengineering and how to perform an in-depth operational assessment once you have observed the symptoms. This installment will address launching the reengineering project after you have completed each stage of the assessment.

Every reengineering project is different, and the solution must be tailored to the situation. Anything other than a tailored solution contradicts the concept of reengineering—which is a ground-up redesign, not the implementation of a predetermined model. However, while the solution details will vary from one project to another, there are proven approaches that can be applied to every reengineering project.

As you launch your project, you'll need to make several choices for how you'll tackle reengineering, including handling all aspects of the initiative in-house vs. hiring an outside consulting company. You can assign the responsibility to a single person, or you can assign a team to work on it. If you go with a team approach, you can assign a team of managers or delegate to a team of non-management. There are numerous combinations and variations possible, many of which I have tried or observed. Through many years of research (actually, through a painful process of trial and error), I've developed a methodology that works. As I'll discuss further, my chosen method in-

corporates the best aspects of many possible approaches and combines them in an effective manner.

The Collaborative Team Approach

I recommend creating teams composed primarily of your people—the people who actually perform the legwork, not management. A professional facilitator should assist each team—someone who understands team dynamics and can keep the team on track. Each team should be augmented with outside “content expertise,” or they should have resources available to them. This approach has delivered results consistently that could not be attained by any other means, and the method provides several key benefits:

- **A better solution.** Through the collaborative efforts of the outside expert and your in-house staff, you can be confident that the recommended solution will be realistic. The recommendation will not be a theory developed by outsiders who don't understand your culture or infrastructure, and it won't be a weak solution developed by a team of insiders with limited expertise in the reengineering of support operations. The solution will be reached through combining outside content knowledge and functional expertise, along with your team's firsthand familiarity of your business, customers, and other pertinent factors, and the result will be an optimized solution.
- **A better implementation.** The ef-

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fectiveness of any problem resolution is dependent on the quality of the solution and the acceptance of those responsible for implementing and maintaining it. Because the reengineered model will be developed primarily by your staff, those responsible for implementing the solution will contribute to and accept the solution as part of the development process. In other words, you won't have to sell them on the solution.

- **Learning (while doing).** Your people will participate in every aspect of the project and, as a result, will be better prepared to maintain and apply the model after the initial implementation. The team members also will be better prepared to resolve similar issues in the future. The reengineered model may be a one-time solution, but the methodology will become an ongoing approach for problem solving.

Defining Teams and Selecting Participants

Don't assign the whole project to a single team. Divide the effort into logical segments and assign a small team to each. This way, multiple efforts can be carried out in parallel, and you can overlap the start of new teams as appropriate. In addition to reducing the overall project timeline (this technique can cut the project length in half), you also will benefit by getting more productivity out of your employees.

The essence of reengineering is process improvement, so you must designate at least one team to focus on process or workflow. The primary process in a support center is call or incident handling, so a team must be tasked with determining the optimal process for routing a customer with an issue to the person who can resolve it. This workflow team also might address problem resolution and problem escalation. However, you could divide dif-

ferent steps in the process among two or three separate teams, depending on the size and complexity of your organization.

An additional team can be assigned to work on the training and cross-training necessary for the newly reengineered process to work effectively; another to work on modifications to the tools, such as the phone menus, skill-based routing of calls, e-mail and/or Web systems, modifications to the CRM system, a knowledgebase, and other enabling technologies; and yet another to define performance measurements or career paths. You also might want a separate team to focus on communication to the various stakeholders.

A good size for teams is four to six people (not including the facilitator or other experts). Assign a good mix of skills and experience on the teams. You should try to organize reasonable representation from each different support group and level of support within your organization. This does not necessarily mean that you need an individual from each group on each team. The goal is to ensure that you have team members with sufficient knowledge of the basic functions of each group and that each group feels assured that they are represented adequately.

When selecting team members:

- **Always ask for volunteers.** The best team members are those who have a real interest and desire to participate. I usually ask for volunteers during a project kick-off session. Make sure that everyone understands that the project will be hard work...it's not just a way to get off the phones! From the volunteers, select your "best and brightest." Although it can be difficult to take your best people away from their normal duties, this is an important project, and you need your top

employees working on it.

- **Balance the level of experience.** Although there may be a tendency to want to put your most senior staff on the teams, the seasoned members you do select must be top performers. These experienced top performers can add tremendous value through their knowledge about your products and customers; however, the so-called "newbies" can offer a fresh outlook and have not yet adopted the "that's the way we've always done it" mindset. A good balance of senior and junior members will deliver the best results.

- **Don't form teams from management.** This is one of the most difficult adjustments for many companies. If the team is made up primarily of managers, you lose one of the key benefits of the team process—staff buy-in. If the project is viewed as just another management initiative, you will miss a golden opportunity to get your people completely bought into your work processes.

Managers generally are accustomed to managing; they want to lead. If you put them on a team, you can risk damaging the team dynamics. Other team members may feel obligated to let the manager lead. They may feel intimidated by the manager's presence, which likely will cause their participation to suffer. The results typically are better if the people who actually do the work are analyzing and deciding on the changes. They generally are better suited to determine the most efficient way to get their jobs done.

- **Design the teams to be successful.** Be very selective; your criteria should be objective and appropriate. Don't select someone simply because the person volunteered. Although I do suggest asking for volunteers, you should not hesitate to turn someone down graciously if the person's quali-

fications are not a good fit for the team. As well, if an exceptional employee who is particularly suited for a position on a team fails to volunteer (perhaps this person already has a full plate), you should ask him to participate, and help resolve any conflicts he may have with his current workload or schedule. The goal is to assemble the best teams you can.

Managing Reengineering Teams

All team members should be provided with training on the team process. Although many of them will have participated in some form of team effort previously, this does not mean that they were trained properly or that the experience provided them with the skills necessary to work effectively on a team. It is important that all team members have fresh training on how to be a productive team member.

Teams must be provided with very clear goals, equally clear boundaries, and well-defined timelines. In my work, I insist that each team sets a weekly meeting schedule. The teams should use the weekly meetings primarily to review the results of individual actions, brainstorm, and then plan out the next set of tasks, which then should be assigned as action items to individuals or small sub-groups. The team can reconvene each week to review progress, analyze findings, discuss the implications, and determine next steps. This process makes effective use of time and allows many tasks to be performed in parallel.

It is very important that each team be provided with expert facilitation. A facilitator can guide the team through the reengineering process, help them avoid common pitfalls, and mediate the inevitable conflicts. It's the job of the facilitator to introduce good problem-

solving techniques and ensure that the team considers all options before coming to any conclusion. Sometimes facilitation expertise is available internally, but very often, it must be brought in from the outside.

Teams also need access to expert resources and new ideas. Often, the teams will be challenged by complex technical issues, such as how to estimate the staffing levels required to deliver a particular level of service or how to structure a knowledgebase so that novice users can find their own solutions. The teams need access to different ideas and examples of industry best practices. Providing expert resources to help the team with particular tasks can shorten the learning curve and improve the quality of the resulting solution.

Communicate, Communicate, Communicate

Throughout the project, communications will play a key role. There should be written output from each team meeting. Reports from each project team might be compiled by the team assigned to communications and distributed as an overall project status report to all of the teams. The communications team can even publish a condensed report for all department em-

ployees (or even the entire company) in the form of a project newsletter.

In addition to written communications, a variety of group information-sharing sessions should be held. I've found that an all-department meeting should be held every 60 to 90 days. These meetings serve to update the rest of the staff regarding the progress the teams are making. This is an opportunity for people to ask questions and to provide feedback to the teams. It's also an opportunity for the teams to test ideas and introduce the new concepts to the staff. Change is difficult for most people, and acceptance generally is easier to achieve if people are allowed time to adjust.

Summary

Reengineering equals major change, and change is always difficult for people. Applying the collaborative team approach can help to minimize the natural resistance to change. Utilize your own staff for the reengineering project, but make sure you provide them with a facilitator and access to necessary expertise. Don't underestimate the importance of communication. Ongoing communication, both internally and externally, can ease concerns and prevent many problems. ▼

Reengineering Customer Support

Part 5: Data Collection and Analysis



Dave Brown is a management consultant, teacher, and writer. Dave teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world-class service operations and is considered an expert in the areas of process improvement, staffing models, and change management. You may reach Dave at his office in Boulder, Colorado, at 303-494-4932 or dave.brown@SupportCenterU.com.

Thus far this year, my column series has addressed preparing to reengineer an organization, performing an in-depth operational assessment, and then setting up teams to carry out the project. Now comes the real work. The data collection stage is the most important step in the reengineering project. The data you collect will become the foundation for the new, optimized support model. Everything you do later in the project will be based on the data you collect in this stage. However, because it's tedious, teams often want to rush through and minimize this aspect of the reengineering. They must not. This step is critical in the reengineering process and must be given adequate attention.

The Goal

The goal of the data collection stage is to gather the information necessary to design the optimal support process. You will design this process by simulating how a new process would work and then analyzing the projected results. Since the optimal process is yet unknown, you must perform numerous "what if" scenarios, going through an iterative process of developing a hypothesis, collecting data, simulating the model, considering the results, adjusting the hypothesis (if necessary), and then repeating the cycle. (I will go into further detail about the actual simulation exercise in a later installment of this series.)

Keep in mind that you are collecting data with the intention of redesigning the process to be more efficient. So it's not so important to measure how things are done today (except as a benchmark), but it is very important to gather the information necessary to predict how things will be, if support modifies its processes. Therefore, an effective approach to data collection is to begin by developing an educated guess regarding the potential new and efficient work process and then collecting the data that either will validate or disprove the hypothesis.

It is very important for the reengineering teams to think outside of the box—that is, beyond the current structure and processes—in order to determine more effective, more efficient ways of handling "calls" (i.e., any type of support inquiry, including phone calls, e-mails, and incidents submitted via the Web). It's typical for calls to be routed based purely on a product, platform, or module basis. However, the reengineering team might determine that it is important to establish the different call "types" based on the reasons for the calls. For example, the team may hypothesize that calls should be sorted into categories such as installation/upgrade questions, how-to questions, and data corruption or other error messages. In fact, they may hypothesize that knowing the product/module and the reason for the call would allow them to

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route the call to the appropriate agent with a high chance of resolution (increasing first-call resolution is one of the best ways to improve overall effectiveness). The team then would need to collect the data necessary to run this simulation.

Regarding the different types of calls, the reengineering team must determine the best way to sort calls in order to maximize the first-contact resolution rate and minimize the case-handling time. This means matching the customer's needs to the agent's capabilities. You don't want to route simple calls to your most experienced tech, and you don't want your less experienced techs struggling with complex calls. In order to maximize efficiency, you must route each call to the most appropriate agent. The key is for the reengineering team to let go of the current structure and process and ask themselves, "What's the best way to sort calls in order to optimize the customer-to-agent match?"

At this point, it is important that the team does not worry about how they will achieve the sorting; they only need to determine what the sort should be based on. I usually instruct the team as follows: "Imagine that you, a very senior tech, must take every call yourself

and then route each call to another tech (or group) for resolution. You can ask only a few short questions and then must send each call to the agent or group that you believe is the best match to resolve it. What would you want to know? What are the logical groupings into which you would put the agents and calls?" The result of this brainstorming is usually something substantially different from the current call-sorting model. Now you need to collect the data to match this hypothetical model.

Data Collection and Analysis

What data is necessary to simulate a support center? You will need a complete profile of the workload, including the call volume, arrival patterns, handle-time information, problem-resolution rates, and follow-up time required for calls not resolved on first contact. This may sound simple enough, but you'll need all of this information for each type of call as well. Furthermore, you need the information in a relational format, and you need to minimize the use of averages.

Now, when I say that you need information in a relational format, I mean that you should not be looking at the various pieces of data independently. For example, you must understand the

call resolution rate in relation to the call handle time, rather than looking at the two pieces of data separately. To avoid using averages, you might group calls into various "time buckets." For instance, you might look at the percentage of calls that are under five minutes, five to 10 minutes, 10 to 15, 15 to 20, and over 20 minutes. These ranges should be adjusted based on your own call profiles, with the intent of understanding the distribution of calls based on handling time. Of course, also look at the percentage of calls resolved during the first contact. Consider these two data points relationally. Of those calls that are under five minutes in duration, what percentage is resolved vs. those that require follow-up? Do the same for those calls that are five to 10 minutes, 10 to 15, and so on. This particular ratio is important in determining the point of diminishing return—when it is less likely that the call will be resolved and more effective to escalate the call for follow-up handling.

In addition to gathering data to forecast future performance, you need some information about current performance (the benchmark) in order to gauge the potential benefits of your what-if scenarios. The key benchmark information includes the current service levels (how long it takes customers to reach a live agent who has the ability to resolve their problem) and current resolve rates (the percentage of calls resolved at the conclusion of the customer's initial phone call). You should measure current customer satisfaction and current costs as well. It is important that you have this information in order to estimate the return on investment of implementing the new model and to measure the results afterward.

Attempting to use existing data is challenging. Many organizations rec-

ognize that they don't have the detailed information necessary to redesign the processes and/or to predict the results of a redesigned process. However, many organizations also resist the idea of going through an intense period of data collection and analysis. I often hear the argument, "We can get that from our CRM or phone system." The company may have expensive systems in place and therefore believe that they should be able to run reports and provide the necessary data. There are two reasons why this may not work.

First, many organizations do not capture data at the level of detail necessary to understand and redesign their processes. Moreover, the data that is collected is relative to the current process. So while it may tell how things are working today, it doesn't yield the information necessary to simulate a different process model. Typically, any changes to the existing reports would require significant effort from the IS/IT department. Changes also may require the addition of fields to the customer support screens in order to capture data that is not gathered currently. In order to gather all of the information needed, it's likely that you would revise the categories of data collected every one to two weeks, and it's not realistic for the system to be changed that quickly and frequently. Therefore, a timely and cost-effective alternative is needed.

The second reason that you can't rely on the existing systems for your information is that you need to validate everything. So you won't rely on those reports, but you don't want to ignore them. If a company has a good CRM and/or ACD system and can run reports, that's great; it's one source of data. Then, use your own data collection methods to validate the information.

A quick and easy data collection method (and a favorite technique of

mine) is the use of "tick sheets." These are simple forms designed to be completed by each support agent for every call handled. The concept may seem archaic, but nonetheless, it can be quite effective. What's more, using tick sheets has the added benefit of keeping the project on the minds of those taking calls and helps keep them involved in the process. In most cases, productivity actually can increase due to this extra management attention. (Google "Hawthorne Effect" for more on this.)

The key to using tick sheets effectively is to make them very simple and non-intrusive for the support reps. Rather than trying to collect all of the information you want to gather about calls in one fell swoop, you can use a series of simple tick sheets. Tick sheets should be designed so that there is no writing required by the call handlers. Each question should be multiple-choice so that agents just check a box. Agents should have one sheet per day, one line per call handled, and only a few check boxes per line. It shouldn't take more than a few seconds per call to complete the tick sheet.

From my experience, three to four data points (questions) per tick sheet is about the limit. Using any more breaks the rule about being non-intrusive. In most cases, a statistically valid sampling can be collected within one to two weeks. You then should review the information and determine the next set of criteria to be collected. By measuring three to four data points, and then changing those data points every one to two weeks, you should be able to collect all of the information necessary within two to three months.

There are a couple of key benefits to this approach. First, the information gathered will be very current and specific. It's more valuable to analyze a small amount of current and targeted

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data than to analyze huge amounts of dated material that may not be representative of current calls. Second, the fact that the agents are involved in collecting the data (and in the project itself) is likely to increase the accuracy of the data collected. You'll get additional "buy-in" from these agents as well, who eventually must accept the new support model.

Although a statistician might argue that the samplings are not statistically valid, I believe that the two former points outweigh this argument. Additionally, I rely on the Pareto Principle (also known as the 80/20 Rule): 20 percent of the call types account for 80 percent of the workload. If you do a good job of analyzing these predominant call types, your basis for design should be effective. Therefore, you don't need to analyze every single type of call down to the minutest detail. The tick-sheet data can provide enough information to complete your plan. The finer details can be worked out later.

Finally, be sure to gather data regarding the follow-up time required for any calls not closed during the initial contact. And you also need data on any other activities performed by the support department, including participation on product design teams, training, and professional services. Again, you need a complete profile of the workload in order to redesign the processes and project the staffing and other requirements accurately.

Yes, collecting and analyzing data can be tedious. But don't be daunted or tempted to jump to what I consider to be the fun part—designing and implementing the reengineered support operation. Thorough data collection is essential to reengineering success. ▼

Reengineering Customer Support

Part 6: Designing a New Model



Dave Brown is a management consultant, teacher, and writer. Dave teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world-class service operations and is considered an expert in the areas of process improvement, staffing models, and change management. You may reach Dave at his office in Boulder, Colorado, at 303-494-4932 or dave.brown@SupportCenterU.com. For more information on the topics discussed in this column, contact Dave or visit www.SupportCenterU.com.

Designing an efficient support center operation involves a little science and a little art, but there really isn't any magic. If you've followed the advice I've offered in my previous installments of this column series, then you are ready. We've discussed preparing to reengineer an organization, performing an in-depth operational assessment, setting up teams to carry out the project, and data collection and analysis. You will need to keep a few guidelines in mind when designing the new model.

When designing any process, it's essential to keep the design as simple and as direct as possible. Each step in the process should add value and move you closer to completion. This means that any step that could be avoided should be avoided. Any handoff or transfer that could be avoided should be avoided as well. A process designed in this manner will make the customer happy and will minimize your costs, too. So where do you begin? Generally, you should start by defining the goal, and then determine the most efficient means of accomplishing it. In customer support, the goal is to resolve the customer's issue. And the most efficient way to do this is usually to get the customer routed to the best available agent for that particular issue. (We'll revisit this later on.)

Before you design your new model, you should understand the pros

and cons of certain design approaches. Most important, you must understand how some approaches—even popular ones such as “sorting”—actually may have a negative impact on efficiency. Second, you need to look at best practices, because certain best practices can be applied to enhance your new model. Finally, before implementing your new model, you must “model” the process and predict the results.

Things to Avoid

In general, you should avoid any design that is known to introduce inefficiencies. Also avoid any unnecessary step or steps that are likely to have a negative impact on customer satisfaction. Let's look at some examples of models that should be avoided:

- **Sorting.** In a “sorting” model, calls are routed to groups of specialists. These groups are dedicated to handling a particular type of call or problem. They don't overflow their calls to other groups or take overflow from others. But because it's nearly impossible to create a group that is exactly the right size to handle the fluctuating workload, service levels and utilization likely will be inconsistent. You may end up with calls queued up for one group while another group has idle (available) agents. This model always will result in either poor or inconsistent levels of service to the customer or poor utilization (in other words, excess cost to you). By all means, avoid this design.

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- **Gatekeeper.** A “gatekeeper” model forces customers to go through some intermediary group before they speak with an individual who may solve their issue. And while a dispatcher for field service is a logical step in that process, the same concept is annoying to customers when applied to a telephone support operation. They view the gatekeeper as a hurdle. What’s more, it’s an added expense for you.
- **Callback.** We live in a world of instant gratification, and supporting customers in “callback” mode is no longer acceptable. Not only do customers expect someone to be available to address their issues when they call, but chances are that customers will be unavailable when an agent does call back. So begins phone tag, a frustrating process for both the agent and the customer and an expensive exercise for the contact center. If you think that you don’t have the staff to handle the calls “live” as they come in, think again. Handling calls live doesn’t require more staff, and it doesn’t increase the workload. If you can handle the work in callback mode, then you can handle it better in live mode. I’ve seen organizations reduce their workload by 50 percent by routing all calls live and eliminating all callbacks.
- **One size fits all.** Your customers have different needs and expectations. In addition, they have different levels of expertise and are likely to have different levels of urgency. If you design a model that treats each customer in the same manner and forces every customer through a system designed for the “typical” or “average” customer, you could irritate and alienate many of these constituents. Employing a process so rigid that it does not recognize and allow for unique requirements will be a problem.

This same lack of flexibility is one of the problems with the traditional “tiered” support model. In such a model, every customer starts at Level One, then gets escalated to Level Two, and so on. Yet, shouldn’t certain customers or certain types of problems be able to bypass Level One and go straight to an expert? What if certain problems are critical? What if certain customers are preferred and pay higher fees? A process that forces everyone through the same steps violates the core concepts mentioned at the outset—those of making sure that every step in the process is essential, adds value, and moves the customer closer to resolution.

Best Practices

Certain models and processes have been proven, over time, to deliver good results. Several published industry studies have found that support centers providing world-class service have a number of common traits. Keep these best practices in mind as you design your new support model, and integrate them into your step-by-step process.

First, define the level of service that your contact-handling process is intended to deliver, and then design a model that will achieve this objective. While this may seem obvious, the reverse is often the case. Define the targets first, then question whether each step in the process is the most efficient way of moving toward the goal.

For example, if you define a goal as closing 75 percent of your incidents on the initial contact, this definition gives you a very solid framework for designing the process. In this example, it would be logical to do everything possible to ensure that the contact/incident is routed to the agent with the right skills. This, in turn, will lead you to design a process that identifies the

customer and issue so that you can route the contact appropriately. See? The goal helps to determine the process design.

But how would you know if a 75 percent first-call closure rate is a realistic target for your call center in the first place? Answer: From a best practice you have employed previously, i.e., data collection (the stage discussed in Part 5 of this column series). If, after analyzing the data you collected, you determine that once an incident reaches the agent with the right knowledge and skills, the resolve rate is greater than 75 percent, then you know that 75 percent is a reasonable target. The challenge then is to design a process that will get the customer to the right agent immediately.

Here’s another way to look at it. Don’t you eventually resolve 100 percent of your incidents (or close to it)? If you have the capability to resolve them, then why doesn’t resolution occur during the initial contact? Yes, there may be several factors involved, including researching for known issues or testing to duplicate the problem, but the most common reason why these problems don’t get resolved immediately is that the agent handling the initial contact is not the best match for the customer or issue. So the goal should be to design a process that will route each contact to the agent who is the best match.

This leads us to the next best practice, skills-based routing (SBR). Many people think of SBR as a technology that is expensive and complex to implement. However, SBR is actually a technique that essentially matches customer needs to agent skills. There are a variety of ways to implement SBR (some are fairly inexpensive), depending on the phone system involved. For

now, let's not worry about the *how* of such implementation (we will address implementation in the next installment of this series). Let's just worry about the *what*. What would you like to see happen? To help you visualize this, create a logical routing design—a flow chart that depicts how calls are identified and classified into certain categories and then routed to agents with certain skills. The opposite of the one-size-fits-all model is a process design that identifies the unique aspects of each call and handles it accordingly. SBR is one method of achieving this.

Equally important is a “triage” approach to handling calls. Just like the triage methodologies developed in field hospitals and still in use in hospital emergency rooms everywhere, a triage support methodology determines the urgency and complexity of each incident so that treatment decisions can be made accordingly. In the service and support world, the triage process must include defined escalation paths and thresholds that ensure customers will receive the appropriate level of attention.

On the surface, this might sound contradictory to my earlier statements about avoiding a gatekeeper model and avoiding unnecessary handoffs. However, the statement is actually completely consistent. If you use some form of SBR to get the caller to the right agent, then the agent is doing the right thing in first assessing whether he truly has the right skills to resolve the issue. If he determines that he is not the most suitable agent to handle the call, then he's doing the right thing in transferring the customer to a more appropriate agent right away. If the process is designed properly, very few transfers will be necessary. But the process should ensure that agents don't

waste their time and/or frustrate customers when someone else would be better suited to handle the issue.

There's another best practice that I refer to as taking a call center approach. I believe this is one of the most important factors when designing a model. What do I mean by “call center” approach? Think about your service/support operation as a “call/contact center,” as opposed to a “technical resource center.” What's the difference? A typical call or contact center manager believes that the key to running a smooth operation is efficient call-flow and call-handling processes. The typical technical support manager believes that support is all about solving technical problems. But I say to first approach the work from the vantage point of a call or contact center and design your processes to handle the workload efficiently. Second, ensure that the people in the contact center have the right set of technical skills to handle the calls. The best practice is always *process first*.

I've been focusing on the best way for the support center to handle “calls,” but be aware that my comments apply equally to handling e-mail or Web-initiated incidents. And when designing your support center process, one of the most important objectives is to do everything you can to get customers to resolve their own issues. While I won't delve into details here, I strongly advise that you integrate self-service options seamlessly into your processes. Customers should be given access to self-service tools, with options to transfer to a live agent or open a new case electronically (Web or e-mail) if the solution provided doesn't work out.

After the Design

Now that you've designed your new

model, you need to test it before leaping into implementation. The thoroughness of your testing should be based on:

- The level of change to be implemented. (How dramatic is this change?)
- The complexity of the model. (Based on the complexity, how likely is it that an error in design occurred?)
- The level of investment. (How much is at risk if the model doesn't meet expectations?)

The more change, risk, and/or complexity involved, the more thoroughly you should test or simulate the model.

There are several ways to test the model. If an outside consultant is assisting with your reengineering, he might conduct the simulation for you as part of his services. But if you are not using a consultant (or even if you are) and you have the time and budget, a couple of tools on the market are designed specifically to simulate a call center environment. For most situations, however, I recommend using a combination of tools that you can assemble or develop yourself.

The Homegrown Simulation

First, review your assumptions. Those assumptions that impact the design are primarily the workload metrics (e.g., call volumes, handle times, traffic patterns, resolve rates). Your model was designed based on these workload assumptions, so be sure that they are as accurate as possible. As I have stressed previously in this series, you always must validate the data. You should be able to reach the same conclusion using at least two different methods.

Next, use a staffing forecasting tool to predict the level of service that will be achieved based on the workload assumptions and the planned level of staffing. This can be a com-

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plex and tedious process, but a workforce management system can simplify the analysis dramatically. If you are short on funds for new applications, you also can handle the analysis using a free demo program or online tools.

Again, a properly configured workforce management tool can run the entire scenario for you in seconds, calculating all of the different call queues, available skills, and hours of operation. But if you're doing this in a semimanual mode, you may need to run each scenario separately. You should run the model for each hour of planned operation, and you may need to run it several times for each hour (if you have multiple queues that

don't "overflow"). For instance, if you have five call queues/groups and your support center operates 12 hours per day, you'll need to run 60 scenarios in order to get a complete view of your predicted performance.

The outcome of this analysis will be a predicted level of service for each call queue for each hour of the day. You also will have the foundation of a staffing model: the number of agents to be scheduled, hour by hour, queue by queue.

Your next step is to build a pro-forma budget. Because you know the key staffing requirements for supporting the inbound workload, you can calculate the related staffing levels. Based on the data gathered in the earlier steps, first determine the workload and staffing required for follow-up or escalated calls. Then determine the staffing for non-call work, such as participation on product development teams. Next, factor in absenteeism, vacation time, and ongoing training. Also calculate the management overhead (one manager for every 10 employees, for example) and the administrative/clerical overhead. With a complete staffing plan, you should be able to build an expense budget.

These exercises should lead to a reasonably accurate view of your new support operation after implementation. Here are the key results:

- **Service level.** You will have predicted the service level (speed of answer) for each hour of operation. You actually can create a table, insert the expected call volume (hour by hour), and chart the hold times (predicted).
- **Resolve rate.** You will have predicted the percentage of calls closed on first contact. You can forecast the calls received and closed and then de-

termine the ongoing workload of follow-up calls.

- **Staffing levels and expenses.** You will have accurately determined the required headcount for the support department, and you will have created a pro-forma expense budget.

- **Customer satisfaction.** This is a little more difficult to predict, as there's more to customer satisfaction than just the quality of service (e.g., product, price). You will, however, be able to state with reasonable confidence that customers will be satisfied with the service they receive.

With this detailed information now in hand, you can perform a comparison between your current operating performance and future operating performance. This will allow you to gauge the potential benefits of implementing the planned model. And if this future state meets your expectations, you're ready to start implementing! ▼

Reengineering Customer Support

Part 7: Implementing the New Model



Dave Brown is a management consultant, teacher, and writer. Dave teaches management training programs for Support Center University (www.SupportCenterU.com). He also consults with selected clients to establish world-class service operations and is considered an expert in the areas of process improvement, staffing models, and change management. You may reach Dave at his office in Boulder, Colorado, at 303-494-4932 or dave.brown@SupportCenterU.com. For more information on the topics discussed in this column, contact Dave or visit www.SupportCenterU.com.

In my previous installments of this column series, we've addressed preparing to reengineer an organization, performing an in-depth operational assessment, setting up teams to carry out the project, the data collection and analysis, and designing a new model. Now we will discuss implementing the new model. When I help clients to reengineer their support operations, I classify the implementation issues into seven major categories: the call/incident routing mechanism, staff planning and scheduling, the case management tools, training, facilities, organizational structure, and communications. The details will vary from one implementation to another, of course. In some instances, no action is necessary in a particular category. Maybe you don't need to change the organization structure or modify the facilities. However, it's an effective rigor to look at each category and consider the potential ramifications of the planned model.

Call/Incident Routing

Translating the call-flow design into reality is probably the most important step in implementing the new model. During the earlier design phase, we created a "logical" flow. We determined how the calls should be sorted for routing to agent groups or individual skills. Now you must translate this logical design into reality. It's simi-

lar to turning an electrical schematic into a physical chip or circuit board. Both phone calls and "e-support" (e-mail and Web) need to be considered. However, it's usually easiest to design the call routing first and then use that as a model for setting up how e-mail and Web-generated incidents are routed.

Designing a call flow is essentially translating the desired logic into a series of voice menus on your phone system. Think back to the data collection phase and how we asked ourselves what questions we would ask a customer in order to determine the proper skills necessary to solve the issue. Consider asking these same questions in the phone menu in order to route callers to the right agent groups or skills. (Example: If you're calling about Product A, press one; Product B, press two; or Product C, press three.) While this might seem simple on the surface, it becomes complex when you must sort/classify each call until you reach a point where you then can hand it to an agent with a [insert your first-call resolution target here]-percent chance that the agent will solve it! This means working through a decision tree until you are confident in routing to an agent for resolution.

Staff Planning/Scheduling

One of the typical management "revelations" during the reengineering pro-

cess is recognition of the importance of staff modeling and scheduling techniques. Proper levels of staffing are critical in order to achieve service level targets. In a typical support operation, being short one or two people (at any time during normal hours of operation) can cause customer hold times to double. In order for the new model to work, you must have just the right number of people with the right skills at the right place (on the phones) at the right time.

There are two major steps in this staffing exercise. First you must determine the required level of staffing (hour by hour). Second, you must build a schedule that assigns specific agents to phone duty. During the first step, you can reuse much of the work from the data collection and analysis phase. In fact, if you did a thorough job of modeling, that model should be step one, leaving only the assignment of agents to complete the exercise. If you did not build a detailed model, you must do so now (see Part 6 of this column series: “Designing a New Model”).

For the second step, you must assign specific agents to be on the phones. This can be simple for smaller operations, but can get very complex with larger groups and multiple skills. Simple or complex, you must end up with a schedule that ensures that you have the appropriate mix of people/skills on the phones for the expected call volume. Since you can’t leave someone on the phones all day, or even for three hours without a break, this can present a challenge. Let’s say that you schedule half of your staff to be on the phones in the morning and the other half in the afternoon. Sounds simple. But what about breaks and lunch coverage? Remember, being short one to

two agents can double your hold times. When one or two agents take a 15-minute break, they return to a backlog of holding customers. And once these customers back up in the queue, those hold times can be with you for the rest of the day. So you must build a staffing schedule that provides consistent coverage throughout the day. If you have 50 or more agents in your support center and you are employing skills-based routing, you should consider workforce management software.

Call Handling/ Management Tools

The next group of implementation issues to consider includes the tools that agents will use to look up customer information, log calls, and solve customer issues. In many companies, these are several separate systems. Very often, opportunities for substantial efficiency improvement through system integration or upgrade are identified through the reengineering process. Whether you choose to improve your systems or not, you must ensure that the systems enable the agents to get their work done effectively.

This task requires that you think through and document every step in the process and consider how each step will be performed. The primary goal is to ensure that each step in the process can be accomplished using the tools that are available to the support agents. The secondary goal is to ensure that the tools allow the agents to be efficient in accomplishing these tasks. Can every step be performed smoothly with existing systems, or will the process require an agent to go back and forth between multiple screens or systems? Think through each step in identifying a caller, looking up the customer record, verifying entitlement,

logging the new call, and so forth. Do the tools enable the process to operate smoothly? If not, does it make more sense to modify the process or modify the tool?

Staff Training

There are three standard categories of training required for employees working in customer support: technical training (your products/services), customer service training (a.k.a. soft skills), and tools and procedures training. Technical training means teaching employees what kind of questions they are likely to receive and how to answer. New employees also should receive customer service skills training—how to ask and answer questions in a way that establishes credibility and control, how to deescalate volatile situations, and so forth. In addition, employees should be trained on how to use the various tools at their disposal (e.g., phone system, call management system, knowledgebase) and the associated policies, procedures, and so on.

When implementing a new (reengineered) support model, you need to reevaluate all three categories of training for all agents. You’re changing the policies, procedures, and tools, so agents certainly will need training to work in this new environment. Also, agents now may be getting calls that they have not handled previously (depending on how you set up your call flow and skills routing). So you must develop a matrix of agent skills and design a cross-training program. While experienced customer support agents may balk at service skills training, these agents often need it most. With all of the changes and all of the required training, it’s a good time to blend a little service skills refresher into the mix.

Physical Environment

A vast majority of customer support centers, particularly in the technology industry, are an offshoot of something else, such as product development or marketing. When you walk through these areas, they often don't look much different than the rest of the company—typical cubes with a computer and a phone. However, you see something quite different at a professional “call center.”

A true call center is designed to maximize the efficiency of the work being performed. You see rows of low-walled cubicles and feel the power of controlled activity. The lower walls are intended to allow agents to communicate with one another (verbally and visually) and to allow supervisors and agents to work together as a team. It's an environment that's tailor-made for the work process.

If your newly designed process separates the inbound call handling from the research and follow-up work, then a separate inbound call handling area may be a worthwhile investment. As much as we talk of multitasking, most people recognize that we are most efficient when we can focus on a single task. And you are even more efficient when the environment is designed for performing that task and when there are minimal distractions. In most support centers, the job entails two primary tasks: (1) taking and handling inbound calls and (2) performing follow-up research and testing issues that were not resolved during the initial call. For many support operations, separating these tasks increases the efficiency. Separating these tasks also can give agents relief from feeling that they have spent all day on the phone with customers (a feeling that can lead to agent burnout

and high turnover). Providing a sense of mental separation from the phones can reduce burnout and turnover, and providing the physical separation helps to establish this mental separation.

Not every support operation needs this separate call center setup. Certainly, there is a cost associated with it. But you must consider the potential benefits of the separate area option (vs. the cost) along with other possible physical changes that would enhance the new process.

Organizational Design

Process reengineering does not necessarily require organizational restructuring. However, if you have redesigned your processes completely, you may find that the existing structure just isn't practical or has too many conflicts. If this is the case, I recommend the following procedure.

After designing your new process and determining the required headcount to staff each function, sit down and design an organization chart that makes sense for your new process. Don't use any names! Just design an organization chart that enables and complements the process and fill in the “boxes” with the quantity of staff required. Then add the management slots that are appropriate based on the headcount and responsibilities (again, without using names). Add in any administrative or other “indirect” roles.

With this organizational design complete, go in and match the existing management names to the available slots. Any mismatches? Resolve them now. Don't try to force square pegs into round holes. Next, have the new management team sit down as a group and allocate the available resources among them. This is similar to choosing teams for sandlot baseball. Sophisticated and

high-tech? No. Effective? Yes. The result should be an organization designed to operate effectively based on the process and workload and staffed based on the best match for the job to be performed.

Communications

At this point in the project, it may seem that the communication issues are the easy part (compared to everything else you must do in order to implement). This may be true, but it is no less important. A well-designed and implemented plan can be undermined by poor communications. You must think through the necessary messages to customers, support employees, and the rest of the company.

Customers are most important. Depending on your business, you may need to communicate many details. Do the same customers call on a regular basis and need to understand the changes and how the new process will work? Will new phone menus confuse customers? Would a letter and a menu map prevent every agent from having to explain the changes to each caller? Or are you fixing problems that have plagued customers and now want to announce the planned improvement? This may be an opportunity for some PR!

The intra-company communications is another opportunity for PR. In many companies, support may catch a lot of flak when things go wrong or when customers aren't getting the best service. Here's your chance to tell them about all of the hard work that went into this redesign and to prepare them for the “new and improved” support model. Typically, sales and marketing are particularly interested and may want to work with you regarding the customer communications as well.

Conclusion

The implementation phase typically takes two to four months. That's two to four months spent planning and preparing for the day you'll "go live"—not two to four months implementing piece by piece. Implementing a reengineered support model is like building a high-performance engine. The final result is dependent on having all of the right components properly assembled and roughly adjusted (we'll tune it later). If you try to run it before all of the pieces are in place, it will flop. Wait until everything is ready, and then throw the switch. ▼

Reengineering Customer Support

Part 8: Fine-Tuning (You're Not Finished Yet!)



In my previous installments of this column series, we've addressed preparing to reengineer an organization, performing an in-depth operational assessment, setting up teams to carry out the project, the data collection and analysis, designing a new model, and implementing the new model. Now you've "gone live" with your new model, and everything is working smoothly...right? Almost? No matter how thorough you've been in your planning, there is usually some tuning and adjustment work to be done. Remember that we reengineered because your support operation was beyond needing just a tune-up. You needed a complete overhaul, and now the overhaul work is complete. But you don't tune an engine while you're rebuilding it, and you don't perfect a support center during the initial implementation. You now have a well-designed and well-built engine, but you need to tune it.

Focus on the People First

The key to success is not only having a good solution, but also gaining the acceptance of those who must implement the solution. Change is difficult for most people, and now is not the time to be hard-nosed. In fact, now is a time when people need some comforting and reassurance. Most of all, they need to be heard. In the days follow-

ing your "go live," you have the opportunity to gain acceptance or lose credibility. You may be very happy with the overall results, but if those who are doing the work are uncomfortable or unhappy, the whole process can fall apart quickly.

Ask everyone for feedback. You used a team process to reengineer the support center, and it's very important for the open communication and involvement of those doing the work to continue. I like to use daily "stand-up" meetings to get feedback from people. These are not long, sit-down meetings. They can be simple, informal meetings for five to 15 minutes at the end of each day or shift, or even several short meetings throughout the day.

Another effective technique is putting a flip chart and markers in the call center for use during the day. The idea is to invite people to write short bullet-point comments during the course of the day so that they can be reviewed during the stand-up meetings. The flip chart makes it convenient for people to make notes while the issue or question is fresh in their minds. It also makes it possible for someone to contribute, even if they aren't going to be available for the meeting. Lastly, having them post the issue makes it less likely that people will raise personal or petty concerns.

What kind of feedback should you

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be looking for? You need to hear what is working well and what isn't. Are there any surprises, or is everything going as expected? Did you overlook anything? Are there any unforeseen challenges in working in this new environment? Do the procedures need adjusting? Are there any ideas for further improvements? Even if everything is working relatively well, you are likely to get good input. Most important, involving the staff and giving them a forum for voicing their opinions will help to build staff morale and ensure their continued backing for the change process.

Measuring...Adjusting... Measuring...

The key to optimizing the support operation is measuring current performance, analyzing the data, and then making the appropriate adjustments. There are a lot of things that can and should be measured. However, let's start with the key operational metrics: volume, traffic patterns, average handle time (AHT), service level (a.k.a. response time), and first-contact resolution rate (a.k.a. resolve rate).

- **Volume and traffic patterns.** It is essential that you measure the volume of calls/incidents and the pattern of arrival (traffic patterns). This information is necessary in order to create an effective staffing model, thereby meeting service level targets while achieving good staff utilization. You must know how many calls (and e-mails and Web-generated cases) are received during each one-hour period throughout the day. Assuming that you sort calls into categories in order to route them to different skill groups, you will need to measure the volume/traffic for each of those skill groups.
- **Handle time.** This is also extremely important. In most cases, we

use the average handle time. When volume and handle time are combined, we have "workload," and knowing the workload is essential to developing an effective staffing plan and hourly schedules. The AHT must be calculated using the same categories or groupings used to measure volume and traffic patterns. In other words, if you sort calls into seven different categories (for routing to different skill groups), then you also must calculate the AHT for each of those seven categories.

- **Service level (SL).** Measuring SL achievement vs. your SL target provides one of the best indications of how well the model is working. If you've designed the staffing model using Erlang or some similar method, measuring the SL results will tell you if there is a problem. If you built a good staffing model and aren't achieving your projected SL, there are only two possible causes. Either the workload is different than projected (look at volume, traffic patterns, and AHT), or the staffing is not as planned (find out if agents are adhering to the phone schedule, logged in when they are scheduled, and so forth). Also, be sure to measure SL in one-hour segments (or smaller), and never rely on daily or weekly "average" service levels. Averages are always dangerous, but when we're talking about SL, averages are useless.
- **First-contact resolution (FCR).** This is another excellent gauge and a true measure of support center effectiveness. If you projected 75 percent FCR during your design phase, but now you are not achieving that target, then you must learn why. The cause usually is related to calls not being routed to the best available agent. This is often a symptom of a staffing model that needs tuning. Sometimes the whole model can seem to be "broken" because of

one relatively minor error.

In an integrated, skills-based routing environment, one skill being understaffed can cause calls to overflow to another group, overwhelming that second group and causing their calls to overflow to another, and so on. This cascading effect can create total chaos in the support center. Carefully measure the first-call resolution rate for each group or skill, and then track down the cause of any discrepancies (missed targets/expectations).

These are the key operational metrics that I recommend every services operation measure. During the fine-tuning period, you should measure these and possibly more. You should measure all of the same things you measured during the operational assessment (prior to the reengineering effort). Basically, you should measure the workload and performance at every point in the new call-handling process.

Zeroing In

What do you do with all the new information you collect? You must rerun the plans. Prior to implementation, you made assumptions and estimates, and then you used those numbers to create your model and to predict future performance. You didn't know how many calls would be sorted into each skill group and estimated AHT and FCR. Based on these estimates and assumptions, you built a staffing plan designed to deliver a certain level of service. Now that you have the model in place, you should collect the real data and then refine the staffing model by rechecking every assumption made during the design phase.

Move quickly to tune it, but don't confuse moving quickly with making rash decisions or changes without proper analysis. Redo all of the simu-

lations and staffing models using the new “real” data. Quickly gain an understanding of the areas that need adjustment, and then make those adjustments. I normally measure and analyze for two weeks, then make adjustments and start another two-week cycle. In most situations, you can get to a well-tuned, highly effective operation within one or two months.

Absorption Syndrome

Something surprising happens to many support organizations in the months following a major reengineering. I call it the “absorption syndrome.” Here’s why. A complete support reengineering typically takes nine to 12 months from start to finish (including the tuning). Some of the changes are gradual, and the improvements often are spread across many aspects of the operation (the improvement is not focused or limited to a single metric). Management can sometimes forget how bad things once were and lose sight of how much progress has been achieved. The improvements are “absorbed” into the operation.

For example, I recently worked on a project where I initially estimated that we could achieve a 22 percent improvement in productivity. Management was adamant about using this gain to improve service, not to reduce headcount. However, over the course of the nine months that it took to implement the changes, management seemed to lose sight of how bad things once were and how much change and improvement had transpired. However, they didn’t forget my 22 percent improvement “promise.”

So there we were, three months after completing the project and a full year from the starting point. From executive management’s view, support

had “approximately” the same headcount as before, and everybody was working just as hard as they always had. They just didn’t think that productivity had improved by 22 percent. So what happened? Why didn’t I deliver what I had promised?

It didn’t take me long to do the calculations. They in fact had five percent less staff than when we started. They also had expanded the hours of coverage provided by the support center by eight percent. And because the business was growing, they were handling 11 percent more calls (volume was way up). By my calculation, that’s a 24 percent increase in the capacity. But the improvements didn’t end there. Prior to reengineering, it took an average of 28 minutes to respond to a customer inquiry (they were in a “call back” mode). Now, they were routing each call directly to a qualified agent in an average of one minute. That’s a huge improvement in service level! So we had increased the organization’s capacity by 24 percent, surpassing the original estimate of 22 percent, *and* dramatically improved service at the same time. But the benefits were absorbed in various ways and were not obvious to management.

The lesson? Make sure you have very good metrics of where you started. Then continue to measure and report the improvements. Do a post-project ROI analysis. Remind everyone of what it was like prior to the reengineering (vs. now). Don’t be put in the defensive position of justifying and explaining. Take a proactive stance and do some self-promotion.

In addition to all of the immediate operational metrics, don’t forget about the fundamental long-term measures of success—financial performance and customer satisfaction and loyalty. I also

suggest that you look back at the eight key indicators (discussed in Part One of this series), both to remember why you did this and to consider new opportunities. Now that you have a good foundation, are there other improvement efforts that make sense? I’ve said that you don’t want to throw technology at the problem (of poor service performance). However, once you’ve fixed the problem, is there a technology solution that now makes sense and may help you to achieve even greater success? Now that you’re providing top-notch services, are there opportunities to segment your customers and offer a wider variety of services options? This is a good time to reconsider your options, rather than rest on your laurels.

Conclusion

This installment concludes this column series. It has taken eight installments to completely describe the process of reengineering customer support. After reading the series, can anyone reengineer a services operation? Well, can you perform surgery after reading a medical guide? Can you rebuild an engine using a mechanics repair book? The answer is yes...if you have the appropriate training and experience to go along with it. In fact, many senior support managers have improved their operations dramatically by following the techniques I’ve described here and completing related training programs. I’ve received letters and e-mails from some of these managers describing their successes and thanking me for providing the necessary guidance. Whether you decide to go it alone or call in professional help, the information provided in this column series can be used as the framework for your support improvement project. Good luck! ▼