Service and Support as a Business

KPI's that Tell the Big Picture

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Introduction

Most IT professionals are familiar with the operational metrics of service and support. KPI's such cost per ticket, first contact resolution rate, and mean time to resolve are well understood and almost universally applied. Yet even support organizations that have mastered these metrics and achieved a degree operational success often struggle to gain visibility and credibility within their own enterprise. The all-to-common result is that service and support operates at a subsistence level, and lacks the necessary resources to deliver effective levels of support.

The business world offers a potential solution to this dilemma. When a business is not performing well, investments in the business dry up because there is no reasonable expectation of earning a profit. By contrast, businesses that are profitable receive adequate funding because they are able to attract investment capital seeking a positive return. So what would happen if IT service and support organizations began operating more like businesses, and were able to attract funding and other resources based upon their profitability?

In this article I outline an approach for managing IT service and support as a business. Additionally, I propose a handful of *business metrics* that can be used to quantify and communicate the profitability of service and support. Finally, I discuss the need to adopt a paradigm shift for any service and support organization that aspires to realize the benefits of operating as a true business.

Return on Investment

Return on Investment (ROI) is one of the most common and important measures of financial performance in the business world. It is the ultimate measure of success for any business. Most companies, business units, and departments track ROI on an ongoing basis, and use this metric not only to make intelligent investment decisions, but to justify their very existence. Yet fewer than 10% of all technical support organizations utilize this critical metric.

Support groups that understand and quantify their ROI gain a number of important advantages; chief among them is the ability to obtain funding and other resources based

upon the ROI of support. Unfortunately ROI remains an abstraction to most in the industry. So how do we calculate ROI and quantify the value of service and support to the enterprise?

IT service and support creates economic value in at least four ways:

1. Reducing ticket volumes through technology and root cause analysis (RCA).
2. Improving end-user productivity by reducing ticket resolution times.
3. Minimizing Total Cost of Ownership (TCO) by maximizing level 1 resolution rates; and
4. Mitigating the effects of downtime through planning, prevention and aggressive remediation.

Perhaps the best way to demonstrate how to calculate the ROI of support is with a case study.

A mid-size service desk at an insurance company had an operating expense of $4.8 million per year. The desk supports 8,190 users, and handles 21,300 tickets per month. Through aggressive root cause analysis, over the course of a year this service desk was able to reduce ticket volumes from 2.6 tickets per user per month to just 2.2 tickets per user per month. The table below summarizes the results of their RCA program.

Metric	Beginning of Year	End of Year	Change
End-Users Supported	8,190	8,650	460
Monthly Ticket Volume	21,300	19,100	-2,200
Monthly Tickets per User	2.60	2.21	-0.39
Annual Operating Expense	$4,769,496	$4,226,448	-$543,048
Cost per Ticket	$18.66	$18.44	-$0.22
Annual Cost per User	$582	$489	-$94

At a savings of $94 per user per year, the total savings attributable to RCA is estimated to be $813,100 ($94 annual savings per user X 8,650 users supported).

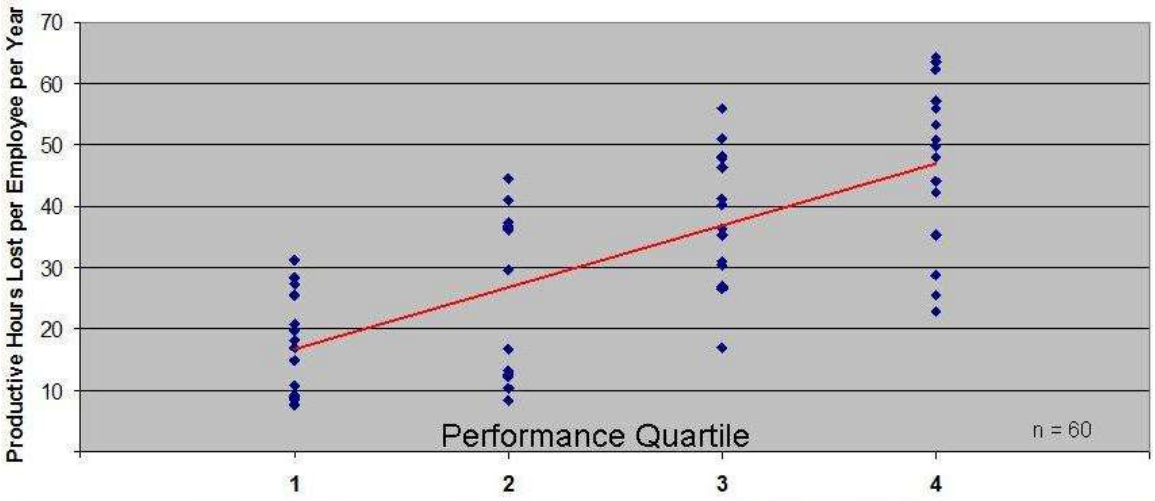
Technology can also reduce incoming contacts, and hence the cost of support. Password management tools are a perfect example of this. In North America last year, password resets comprised nearly 25% of all contacts to the service desk. By adopting a password management tool, a typical service desk can eliminate half or more of the resets that would otherwise be completed by a live agent. This amounts to real savings for any support organization!

Now let's examine how service and support can make end-users more productive. The majority of today's workforce is comprised of knowledge workers, all of whom rely upon one or more computing devices to do their jobs. In fact, the average user now has nearly three devices: laptop computers, desktop computers, tablet computers, smart phones, and even printers and servers! When these devices break down or do not function properly, employee productivity suffers. By preventing these incidents from occurring, and by

quickly resolving issues when they do occur, a support organization can return productive hours to the workforce.

A study conducted by MetricNet and summarized in the figure below concluded that knowledge workers lose an average of 33 hours of productive time per year due to various IT outages, breakdowns, and hardware and software failures. For support groups performing in the top quartile of the industry, the lost productivity per worker is just 17 hours per year; about half the industry average. By contrast, employees who receive support from bottom quartile support groups lose an average of 47 productive hours per year.

The difference between the top and bottom quartile performers is a staggering 30 hours per employee per year! Put another way, support organizations in the top quartile are able to return nearly four extra days of productivity annually for every knowledge worker in the enterprise. When multiplied by thousands or even tens of thousands of employees in a company, the productivity gains and ROI delivered by a top performing support organization can be enormous!



Support Function	Key Performance Indicator	Performance Quartile			
		1 (top)	2	3	4 (bottom)
Service Desk	Customer Satisfaction	93.5%	84.5%	76.1%	69.3%
	First Contact Resolution Rate	90.1%	83.0%	72.7%	66.4%
	Mean Time to Resolve (hours)	0.8	1.2	3.6	5.0
Desktop Support	Customer Satisfaction	94.4%	89.2%	79.0%	71.7%
	First Contact Resolution Rate	89.3%	85.6%	80.9%	74.5%
	Mean Time to Resolve (hours)	2.9	4.8	9.4	12.3
Average Productive Hours Lost per Employee per Year		17.1	25.9	37.4	46.9

Let's apply these numbers to the insurance company in our example. We know from benchmarks that this company is a top quartile performer in service and support. We also know from the study referenced above that the difference in lost productivity between a top quartile and an average performer is about 16 hours per user per year (33 hours of lost productivity for an average company – 17 hours of lost productivity for a top quartile performer). When multiplied by 8,650 end-users we can estimate a total labor savings of 138,400 hours per year (16 hours per year saved X 8,650 users). The average work year

has about 1,700 productive hours in it, so this labor savings is the equivalent of 81 FTE's (138,400 hours per year saved ÷ 1,700 work hours per FTE per year). Finally, we know that the average cost per employee in the insurance company is $79,300 including salary and benefits. The economic value of being a top quartile support group is therefore about $6.4 million annually (81 FTE's X $79,300).

The third source of quantifiable value derives from reducing support costs by maximizing level 1 resolution rates, sometimes referred to as "shift left", i.e., shift a level 2 ticket to the left by resolving it at level 1 or 0 (self help), and shifting a level 1 ticket to the left by resolving it at level 0. Recent benchmarks show that the average level 1 resolution rate for North American service desks is about 82%. What this means is that 18% of all tickets that could and should have been resolved at level 1 are transferred or escalated to another source of support for resolution. These unnecessary escalations represent defects in the support process, and result in increased costs that often go unnoticed because they are rarely tracked. Please note that level 1 resolution is not the same thing as first contact resolution. Level 1 resolution is the number of tickets resolved by the service desk divided by all tickets that can *potentially* be resolved by the service desk, regardless of whether the ticket is resolved on first contact or not.

As shown in the figure below, the cost of resolution increases with each successive ticket transfer to a higher level of support. The insurance company in our case study had an impressive 93% first level resolution rate (FLR). That is 11 percentage points higher than the industry average, and equates to resolving an additional 25,212 tickets per year at level 1 vs. the industry average (93% FLR - 82% FLR) X (19,100 tickets/month X 12 months). If we now multiply this by the difference in cost between tickets resolved at level 1 vs. tickets resolved at level 2, we can estimate a cost savings of $1,008,480 per year: 25,212 tickets per year X $40 per ticket ($62 per ticket at level 2 - $22 per ticket at level 1).

Support Level	Cost per Ticket
Vendor	$471
Field Support	$196
Level 3 IT (apps, networking, NOC, etc.)	$85
Level 2: Desktop Support	$62
Level 1: Service Desk	$22

Once again, technology can play a crucial role in reducing an organization's service and support costs. Knowledge Centered Support and remote diagnostic tools are among the most common technologies used to improve first level resolution rates, and hence reduce the TCO of support.

The fourth source of economic value in IT support – the mitigation of unplanned downtime – is difficult if not impossible to quantify. Nevertheless, it is important to acknowledge this source of value, and to actively engage in strategies that reduce unplanned downtime. These include, but are not limited to disaster recovery drills, proactive/outbound user notifications by email, text, and social media for major downtime events, and recorded IVR messages that inform inbound callers that service and support is aware of and working to resolve any major issues.

To conclude our case study, let's calculate the ROI delivered by the service desk in our example. We have the following estimated cost savings:

$0.8 million saved through root cause analysis
\+ $6.4 million in returned productivity to end users
\+ $1 million saved by maximizing first level resolution
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Total Savings = $8.2 million annually

With an estimated cost savings of $8.2 million, and an annual operating expense of $4.2 million, this support organization is indeed profitable, and has an ROI of 195% ($8.2 million returned ÷ $4.2 million invested). Moreover, if they continue to operate at this

level or higher, these estimated savings and their impressive ROI will be realized in future years as well!

The Business of IT Service and Support

The case study introduced several business metrics that can be adopted by any support organization. The most important metric, of course, is ROI. The underlying metrics that make it possible to calculate the ROI of support include first level resolution rate, tickets eliminated through root cause analysis, and productive hours returned to end users.

While most support organizations track FLR, very few track the other two metrics that factor into our ROI calculation: tickets eliminated through RCA, and productive hours returned to end users. Some are suspicious of these metrics because they lack precision, and often involve some degree of estimation. This should not, however, dissuade you from calculating the ROI of support, as the benefits of doing so far outweigh the costs.

Demonstrating a positive ROI, by itself, may not be enough to resolve the funding, credibility, and visibility issues that hobble many support organizations, and prevent them from achieving their full potential. I believe that a fundamental paradigm shift is also needed: you must start thinking and acting like a business. This requires that you effectively communicate your ROI to key stakeholders, particularly to IT management. Moreover, your message must be bold enough to get noticed, and it must be persuasive enough to overcome any internal resistance to change. While this may take some out of their comfort zones, the alternative – a tactical, subsistence-level support organization – should be motivation enough to overcome any reluctance you may have about aggressively communicating your ROI.

Rational organizations fund businesses that are profitable. Now that you have a methodology for calculating the ROI of support, you should use this tool to elevate your service and support organization to a new level within the enterprise. Think of yourself as the owner of a profitable business that deserves to be funded at a level commensurate with the return produced by the business. If you believe that additional headcount, technology, training, or any other investment is needed to empower your support organization to deliver the best possible service, you should ask for it…no, you should demand it! But you should do so armed with the knowledge – and proof – that your support organization is producing a positive ROI for the enterprise!

About the Author

Jeff Rumburg is a co-founder and Managing Partner at MetricNet, LLC. Jeff is responsible for global strategy, product development, and financial operations for the company. As a leading expert in benchmarking and re-engineering, Mr. Rumburg authored a best selling book on benchmarking, and has been retained as a benchmarking expert by such well-known companies as American Express, GM, Hewlett-Packard, and Bayer. Prior to co-founding MetricNet, Mr. Rumburg was president and founder of The Verity Group, an international management consulting firm specializing in IT benchmarking. While at Verity, Mr. Rumburg launched a number of syndicated benchmarking services that provided low cost benchmarks to more than 1,000 corporations worldwide.

Mr. Rumburg has also held a number of senior management positions at META Group, and Gartner, Inc. As a vice president at Gartner, Mr. Rumburg led a project team that reengineered Gartner's global benchmarking product suite. And as vice president at META Group, Mr. Rumburg's career was focused on business and product development for IT benchmarking.

Mr. Rumburg's education includes an M.B.A. from the Harvard Business School, an M.S. magna cum laude in Operations Research from Stanford University, and a B.S. magna cum laude in Mechanical Engineering. He is author of *A Hands-On Guide to Competitive Benchmarking: The Path to Continuous Quality and Productivity Improvement*, and has taught graduate-level engineering and business courses. Mr. Rumburg currently serves on the Strategic Advisory Board for HDI, formerly the Help Desk Institute.

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About MetricNet

MetricNet is the leading source of on-line benchmarks, scorecards, and performance metrics for corporate managers worldwide. MetricNet benchmarks encompass virtually every industry and government sector, and address all major business areas including Information Technology, customer service, and technical support.

Our mission is to provide our clients with the benchmarks they need to run their businesses more effectively. MetricNet is committed to making the benchmarking process quick and easy for its customers. We have pioneered a number of innovative techniques to ensure that our clients receive fast, accurate benchmarks, with a minimum of time and effort.

MetricNet offers a number of competitive differentiators vs. other industry consulting firms. These include:

- **Credibility and Experience** – The principals of MetricNet have collectively completed more than 1,400 benchmarks since 1988. Each of them has extensively researched, written, and published on the topic of Service Desk Best Practices. Prior to joining MetricNet, the founders of the company held senior management positions at a number of companies including Gartner, META Group, MicroStrategy, the Stanford Research Institute, and the Verity Group.
- **Benchmarking Database** – MetricNet's Service Desk Benchmarking database is the most comprehensive in the industry. The database contains information on more than 30 Key Performance Indicators (KPI's), salary data for key service desk positions, technology profiles, and more than 70 best practices from hundreds of service desks worldwide.
- **Methodology Expertise** – Through decades of Service Desk consulting experience, MetricNet has perfected its methodology for Service Desk Benchmarking. MetricNet's

approach to peer group selection, data normalization, gap analysis, and action planning yields consistently positive results for its service desk clients. One of MetricNet's co-founders, Jeff Rumburg, authored the first ever book on benchmarking in 1989, and MetricNet has authored and published numerous articles on the topic of Service Desk Benchmarking.

- **Objectivity** -- MetricNet's recommendations are independent and unbiased. We have no relationships with hardware manufacturers, software vendors or systems integrators, and we do not perform downstream hardware or software implementation work. As a result, our clients receive objective recommendations that are free from any vendor bias.

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