White Paper

Leveraging “Data Data Data” for Effective “Service Marketing”

Based on the
SIA Executive Roundtable
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White Paper: Leveraging Data Data Data for Effective Service Marketing

Expanding on the themes discussed at the SIA Executive Roundtable on June 10, this paper provides specific examples of how "Data Data Data" can be used to drive the value-added advantages of "Service Marketing". These ideas are based on extensive experience with data collection made by end users, OEMs, and service industry organizations in our development of TekTrakker. Turning data into actionable and marketable programs is at the heart of our association with the SIA.

Roundtable Recap:

The SIA Roundtable of June 10 linked two important themes for future success. First, in order to escape the discounting trap, Jose Bernal argued effectively that SIA members will benefit from transforming their price-focused marketing into "Service Marketing". Second, Rich Guglielmo expanded upon Tom York's admonition that the future belongs to those with data. It was clear that the multitude of data points being captured by SIA Members are the engine through which service value can become client value.

- What do SIA Members know from their data that clients value?
- How can existing data be better used to improve profitability ?
- What data points are missing or underutilized?
- How would an SIA Member utilize data to differentiate themselves from competitors?
- How, specifically, can SIA Members use data to enhance the business of the client ?

Identifying Actionable Data

The service business is a data intensive business. Dozens of data points are captured, and are necessary, to execute a service request from start to finish. These data points are already drivers of a wide variety of *internal* service metrics – from calculations of parts and sparing needs, monitoring of service teams for performance, and all manner of financial metrics.

The most *powerful, unique, and underutilized* data common to all SIA members is the ability to effectively calculate Mean Time Between Failure (MTBF). MTBF is the ideal metric for both improving internal evaluation of service and delivering data of value to clients. Better still, the conceptual exchange between clients and SIA Members based on MTBF is a C-set discussion that falls well outside the standard purchasing negotiation.

The questions above are answered by the following uses of MTBF data:

- MTBF is a powerful tool for rationalizing the delivery of service to the needs of the equipment.
- MTBF is the ideal measurement of product quality, which can be used to measure vendor performance and inform product selections
- MTBF comparisons can differentiate between service delivery vendors and approaches
- MTBF informs all internal operations

MTBF Competitors

SIA Members are in the best position to capture, calculate, and deliver accurate and actionable MTBF data to the client. This is because, unlike the OEM, the SIA Member has control of both of the essential data points (quantity and repairs), whereas neither the OEM or the End User is able to connect the data.

The reality of the supply chain has disconnected the OEM from this knowledge on several levels. First, most equipment is now manufactured under contract overseas. The OEM may specify a particular MTBF for a part, but the final product is not controlled as to MTBF. Second, whatever post-production bench

testing performed is too limited to shake out all possible problems. The first inklings that a product has problems are the RMA requests from clients.

Further, the OEM does not have the ability (perhaps with the exception of the IBM mainframe) to know the volume of products actually deployed and therefore cannot accurately calculate MTBF even if seeing all the RMA activity. Shipping is not the same as deployment, and a valid calculation of MTBF cannot be made when thousands of units are sitting in distribution. Because the delivery of service lies in the hands of SIA Members, the RMA ticketing process connects the SIA Member to both the quantity of devices under contract as well as the actual repair detail.

Even more advantageously, expiration of initial warranty removes all connection between the OEM and their understanding of field product failure. Over time, the OEM entirely loses the ability to follow products over their useful life. Once again, the SIA membership can provide more and higher quality data than the OEM.

End users, despite massive investments in tracking software such as "Remedy", are abysmal at tracking repairs. The end user barely knows which products they have deployed. Many have formally, or informally, outsourced the IMAC function to the service provider. Whatever MTBF data generated at the end user level is never consistent, is reactive, and often full of massive and implausible flaws.

This is a specific advantage for SIA Members and can be exploited easily to add value to the client.

Section Two - Client Perceptions:

End user clients lack the education and tools to differentiate between good and bad service contracts and providers. Left to themselves, end users will always differentiate vendors on price, since they cannot quantify value. Client perceptions of service are rooted in several common misunderstandings (myths) about the nature of the service relationship. Each myth, when debunked, creates opportunity for marketing value.

Myth # 1 : Warranty is Free.

Most end users accept the vendor proposition that a long term service contract (aka warranty) comes with the product for free. The client does not realize that the real product warranty is quite short (otherwise the vendor cannot fully book the sale) and that they have entered into a negotiable post-warranty service contract without the negotiation. Even when the true warranty terms are clear, negotiation of the discount for warranty ignores the basic question about how much service is actually needed.

> *Service Marketing Opportunity: Match the service program to the service need based on the service profile of the equipment.*

From the client perspective, having a discussion based on the rational service requirements of the equipment is valuable and quantifiable. Not only might the OEM pricing proposal be egregiously overpriced, but the service company offering the rational solution has already elevated the relationship to trust instead of discount.

As a hypothetical example, the service profile of 100 small wintel servers with a MTBF of 44 months, mathematically translates into only 28 repairs over a 3 year period. Armed with this data, a service relationship can be built based on how best to support those devices, not which standard SLA to purchase. Since the SIA Member is the unique source of this data, real value is delivered to the client.

Myth # 2: Service Contracts are an Insurance Policy against Downtime.

Users completely mis-understand the function of a service contract and justify high-cost OEM SLA response requirements as an "Insurance Policy". The reality is that electronic equipment will break (or not

break) based on factors unrelated to the speed at which a technician can be contracted to appear. Yet users constantly confuse the quality of the equipment with the service level agreement. Breaking down this confusion can lead the discussion away from price and into value.

> *Service Marketing Opportunity: Disrupt the OEM lock on SLA options by connecting actual service needs to service response needs. .*

Real example: A large pharmaceutical company realized from culling their own repair data that they needed a fast (4 hour onsite) service response on only a handful of server units a year. They negotiated with their OEM to have their service pricing include twenty "Urgent" events per year, rather than pay for 4 hour response across the portfolio. This had high-value and was negotiated at the C level. The savings to the organization were in the hundreds of thousands a year.

SIA members already capture superior detail than end users and can present this type of offering more easily and with greater detail. This end user could not begin to unlock similar savings with other products due to lack of data.

Myth # 3 – Redundancy Eliminates Risk of Downtime

Many devices include redundant parts in order to buffer the end user from the inevitable downtime and service urgency that would otherwise result from a part failure. The end user usually accepts redundancy as a good thing, instead of being concerned about the high rate of failure that this approach implies.

The "pain" in this arrangement is two-fold. Not only are organizations worried about losing a redundant part and going naked, they are also spending a great deal of money to manage and monitor replacements of spares. Each failed item exercises the entire repair structure – from help desk to security personnel providing access to the facility. Some devices cannot be repaired "hot" – they must have scheduled downtime. Managers are reviewing access, security and SLAs even if the equipment never goes "down".

> *Service Marketing Opportunity: Help the end user improve their business by alerting the client to products with higher than normal failure rates.*

Comparing equipment on the basis of failure rate is essential for end users to being able to buy *or retain* products that are proven to be the least troublesome. End users are searching for this information and value it highly.

Myth # 4: The Best Service is Provided by the OEM.

End Users are brainwashed to believe that the OEM will always do a superior job of service. Even when informed that a 3rd party is already the service provider as a subcontractor, they link purchasing a vendor service agreement with keeping the vendor "On the hook". (They also link vendor financing with the same support quality issue – another huge misunderstanding.). Unlike the "Firedog" contract offered by Flex through consumer retailers, the connection between the business purchase and the vendor warranty remains linked.

> *Service Marketing Opportunity: De-couple the service decision from the product selection using documentation of service quality and value.*

Documenting service quality is the only way to elevate the service discussion from price to value. Where there are actionable differences between service teams, or service approaches, those differences will be reflected in the failure rate. Better still, third party validation (as in TekTrakker) would support claims of superior service by providing a scale of comparison. Absent data, everyone can brag about being the best and no one will believe them.

Section Three – Working Effectively with MTBF

MTBF is one of the simplest of all statistics and is most powerful when presented as a MTBF of a discrete population of devices without any extrapolation. MTBF is well understood as a measurement of quality. Unfortunately, much of the consistency needed to calculate MTBF is buried in the data already collected in the routine course of business. Buried is a deliberate term. Many SIA members have difficulty teasing their databases for useful metrics because there is so much data, with so few standards, with crucial details often locked behind free-form text.

Difficulties Calculating MTBF

The first difficultly is defining failure. Each SIA member is calculating their own version of failure rate which may not align at all with the client perception and certainly not in a form ripe for sharing. Each SIA member has set up their systems, often over decades, primarily to make the mechanics of service delivery efficient. Many systems are full of free-form text in key areas. Many contracts lack key data points because the service team may be a subcontractor. MTBF calculations should be easy, but this is not always the case.

Critical Data Points

Members may need to improve their data collection if they lack one or both of the essential data points for calculating MTBF. MTBF requires both the quantity of equipment under contract, and the quantity of failures against that inventory. It is essential that both be available for every unit of time used for the MTBF calculation. (We recommend using months) Time and materials contracts may be very challenging to manage in that the quantity of devices may be unknown. Some data may need to be excluded.

Actionable data is only as good as the inputs to the calculations. If product descriptions are too weak to point to a particular model, that data cannot drive MTBF. If repairs are made against assets for which there is no known inventory, that data cannot drive MTBF. While the contract may be able to bill for these events, the data capture process is not delivering value either internally or externally. No organization can plan for spares for unknown products. No end user can manage the lifecycle of undocumented failing equipment.

Key Associations

Calculating the MTBF of a model also requires the failure be readily associated with a specific model. Many systems link repairs by ticket number, or serial number, which then must be cross-referenced to a model or serial number table in order to create the connection. Unless the data collected in this manner is automated, so many errors can be introduced with manual data entry that the results will almost certainly be garbage.

Another very common problem is a failure to note the actual model repaired, rather than the model of the original call. A classic case is a repair initially requested for PC, but the actual repair is executed on a printer. Unless the system requires the models to be confirmed, all such repairs will be incorrectly associated with the initial product call. While a small percentage of errors can be tolerated from a statistical point of view, when designing systems these issues should be anticipated.

Banish Free Form Text

The hands-down largest problem with data collected during the repair process for everyone is the presence of free-form text descriptions at critical points. (The OEM call center systems are a major source of volumes of junk text.) The good news is that whatever junk is delivered at the beginning of the ticketing system can be entirely ignored once a repair is made. However, at a minimum, the resolution of the problem must be captured as a succinct description. Electronically sorting on a limited set of drop-down options is infinitely more effective than culling actionable data from paragraphs of discussion.

Too Much Detail

The flip side of too much free form text is too much detail. Part numbers are a perfect example. Analysis of problems by type of part (hard drive) are impossible if the part number, rather than the part type, is the only detail captured. Thousands of SKU all point towards the same type of device. While this detail is important for stocking and ordering replacement parts, from the standpoint of delivering client value, the ability to inform and discuss the types of product failures is essential, while the specifics of the part are irrelevant. The solution is to capture both part type and part number (outside of free form text, of course).

Section Four – Leveraging Data Between SIA Members

Clearly, not all SIA members service the same equipment in the same volume. Some members may have predominately "vintage" equipment under contract, and others may be the arms and legs of a vendor warranty program. In order to make better use of data regarding the failure rate of equipment, most, if not all SIA members would benefit from access to the MTBF of a wider spectrum of products than those individually supported.

The most powerful reason to share data is to be able to support claims of service quality in the value sale. Not all service technicians and business processes are equal. All SIA members, whether good or bad, need to know their relative effectiveness. The only way to compare good to bad is to have a scale.

Real example in laptop service data: We noted the failure rate of identical equipment to be 2-fold different between two different service providers. Because we saw both datasets, we were able to determine that the difference was entirely due to the volume of hard drive replacements. One vendor was pulling the hard drive twice as often as the other. Laptop users appreciate that a hard drive replacement is a major loss of productivity – if not data. Without seeing data in comparison to others, neither service organization would know if they were delivering excellence, or not.

SIA /TekTrakker Database of MTBF

The SIA has long wanted to facilitate collection and dissemination of MTBF data between members. To this end, TekTrakker and the SIA have teamed to set up a TekTrakker database of hardware failure rates (MTBF) exclusively for SIA members.

There is no mystery as to why this hasn't been done previously. Every company already has their own set of standards and syntax for data collection. As much as the sharing would be powerful, none can afford to redesign or reprogram systems just to regularize the name of "Hewlett-Packard" to "HP" as an example. There are also significant problems with the ways in which root cause analysis or parts used as described. Much data remains trapped in free form text.

Our innovation is to conform both asset descriptions and repair data externally to our standard, rather than force the members to change syntax, descriptions, procedures, or modify any programming. The only effort to share data is to provide a file, in any format, containing at least the minimum data points discussed above.

TekTrakker conforms data to our standard, cleans the data, and then calculates the MTBF of all devices reported. Results are organized for easy retrieval on the database. TekTrakker is a tool for SIA members and not a publication. Members see their reported experience of product failure in one column, and the comparison to the aggregate of all other members in another. No members know the identity of the others, and none can discern the source of the specific data.

Details of the SIA/TekTrakker program are available on the SIA Website in the Members section , on the www.tektrakker.com website, email gbyrne@tektrakker.com or by telephone at 973-949-5164.

SIA/TekTrakker Program Outline
June, 2010

All Members of the SIA are eligible to join TekTrakker as a deeply discounted Membership benefit. The discounting is reflective of the unique opportunity that participating at the kickoff of production brings to the endeavor.

- Prospective SIA Members have incentive to join for the discount
- The more members, the more powerful the database
- SIA Members share in fee-income for data sales

Quantity Guarantee:

In order to guarantee that Members are provided with the full value of TekTrakker, no Access Fees will be invoiced until there are at least 5 members contributing data for a category. Membership fees still apply.

Quality Guarantee:

Data quality is essential to the operation of TekTrakker. All Member data must first be evaluated as to quality before being accepted. New Members will be allowed to withdraw from TekTrakker at no charge if their data cannot be used.

Membership Requirements:

Members must share data about their equipment failures in order to participate. Data is absorbed by TekTrakker in any type of file structure in any format that includes both the quantity of assets (by model) and their associated failures. Raw files in their native form are preferred to extracted reports.

Membership Options:

- Free Trial

TekTrakker offers a 90-day free trial to any prospective member. The trial is performed on a retrospective 90-day history of any single category of equipment (e.g. servers). The results of the trial are provided promptly in both hardcopy and available on the website with limited guided access. Documentation for the free trial consists of a Trial Agreement or MNDA.

- Membership

Membership provides the full benefit of TekTrakker with unlimited web access as well as unlimited softcopy downloads. The **one-time** Membership fee of $ 1,650 ($3,300 for non-members) entitles members to all the reporting and data evaluation of an unlimited quantity of models across all categories of equipment. Non-SIA Members are also subject to a $10 per model charge over 100 models.

- Database Access and Updates

The continued updating of models and data is chargeable as an Annual Access Fee of $ 1800 ($3600 for non-members) separate from the Membership Fee. SIA members may also select a monthly credit card billing option of $175 per month. All new model reports are covered by the Annual Access Fee.