Every reasonably large IT service management vendor (including consultancies and suppliers) has developed its own model to analyze customer performance and perhaps even measure and benchmark its operation. However, changing from one consultancy to another may cause problems in analyzing trends, due to different definitions and algorithms. Comparing apples and oranges does not yield valid results. This lack of standardization restricts some companies from measuring their IT functions in a structural way.

The itSMF benchmark provides a simple industry standard solution. The joint member model is being shared with business sectors and countries, enabling the whole of the itSMF community to learn from each other. This offers organizations the opportunity to set long-term targets, resting assured that whoever they use for advice can conform to the itSMF benchmarking standard.

To ensure the participation of many organizations, this model needs to be up-to-date with the most popular current frameworks, quality standards and maturity models. The model will have a periodic independent third party audit to ensure its quality and accuracy. Key to any benchmark is the data’s integrity. Client data must be stored and managed by a reliable organization which keeps it safe and anonymous.

The itSMF Netherlands (itSMF NL) has accepted the responsibility to support and sponsor the itSMF benchmark model on behalf of the wider community. The model should be, and is, relevant to in-house IT functions, vendors and outsourcing service providers. It is especially important for this last category of vendors to use a generally accepted “open source” standard for measuring performance and cost efficiency.

The operation of the itSMF benchmark has been outsourced and revenues will be used to further improve and expand the model. Participating local chapters will receive database analyses reports, which they can publish for their members.

With the approval of the itSMF members we have decided to focus on the following main parts of the benchmarking model:

- ISO/IEC 20000
- process maturity
- total cost of ownership
This article will initially outline the main benefits of IT benchmarking. Then, it will explore the key parts of the model and explain how they are used. Finally, it will provide some examples of the itSMF benchmarking data collection tools and show how results are being presented.

THE MAIN BENEFITS OF IT BENCHMARKING
Management and measurement go hand-in-hand. A recent survey from Bains Company (Rigby & Bilodeau, 2007), shows benchmarking as the second most commonly used management tool in large parts of the world.

Many large IT service management organizations use benchmarking as a tool to optimize IT service based on the performance of leading peers. IT benchmarking is often employed as a response to external pressures concerned with efficiency or effectiveness, forcing an organization to show how their own performance compares to their peers.

Enlightened organizations are using benchmarking in the context of continual service improvement. They are able to demonstrate improvement as well as slippage over time, alongside their Service Improvement Plan (SIP).

The main strength of benchmarking is the detailed comparison with similar best practice peers. This entails attention to detail, understanding the differences and taking action to meet upper quartile performance levels.

Benchmarking can show levels of quality that are available in the market against given unit costs.

The analysis of gaps between an organization’s performance and that of benchmark peers results in the identification of strengths and opportunities. These strengths may be used to boost the confidence of IT staff and build trust with external service providers.

TEN REASONS FOR BENCHMARKING

1 Specified actions for improvement
Wouldn’t it be great to have a detailed checklist of steps to become a “best practice” IT service management organization? Or, at the least, an organization with a sufficiently well performing delivery function given the cost limitations, as it is difficult to be best in all areas.

The itSMF benchmark asks the right questions and provides an organization with the answers, based on performance elsewhere within the itSMF community. The performance gaps become an organization’s improvement checklist to become even better than they are today.

2 Step-by-step plan for ISO/IEC 20000
The appearance of the ISO/IEC 20000 norm led to the creation of the itSMF benchmark. We are convinced that this norm will be fully embraced by many itSMF members by the end of

With the ITIL® certificates, it was only possible to certify individuals for their IT service management skills. ISO/IEC 20000 certifies the IT service management organization as a whole. And that is what it is really all about.

The benchmark includes an ISO/IEC 20000 assessment, using scores and evidence to verify an organization’s true position. For each process, we have identified detailed questions about whether or not an organization complies to the standard. For an example of this please refer to the section on the process benchmark. We have also identified the part of the standard to which the questions relate. This simplifies the prioritization of those items which score insufficiently.

A self assessment only relates an organization’s position to the ISO/IEC 20000 standard. The itSMF benchmark also shows how its performance relates to its itSMF peers, in what respect they are ahead and where they fall behind. This helps in setting priorities as well.

3 Choose whether or not to improve

Even if an organization has a service improvement list, it would be too much to ask them to work on all items at the same time. Implementing these types of improvements is, typically, additional to daily operations. We often see a budget for operations, but rarely a budget for process improvements. Organizations look at these types of improvement projects on a case-by-case basis.

The benchmark also helps organizations to determine how much they should improve and prioritize their improvement work.

4 Choose investments

Business applications need to be available. In case of an outage, staff need to respond in a manner that re-instates the service within, or close to, service level targets. This means that we need to follow pre-determined minimum levels while working on a number of processes. The itSMF benchmark establishes these minimum maturity levels and helps prioritize process improvement projects.

An organization that still runs its IT fully in-house, can easily determine its Total Cost of Ownership (TCO). This helps identify strengths and weaknesses and offers a list of quantified action points. To clarify costs involved, we look at the number of staff employed in each process.

5 Options for cost reduction

To do more with less is the continuing challenge for IT managers. Automation tools, process design and user self-service are key to delivering high quality service at low cost. Measurement is vital to managing the IT function. This means an organization knows its assets and how to use them. A TCO survey will answer many questions on unit cost, personnel productivity and service quality.

The itSMF benchmark is all about discovering and describing best practices. As soon as processes become reasonably mature we see higher levels of cost efficiency and maturity.
6 Baseline measurement (the perfect picture)
A baseline created by a benchmark will result in a detailed picture of an IT service management organization. The high level of detail of the process questionnaires, in combination with the performance metrics and high level costs, offer a number of interesting views:
- cost versus maturity
- cost versus performance
- maturity versus performance

Such a study will uncover true strengths and weaknesses and offer detailed process improvement opportunities.

When the benchmark is repeated, the trend charts show the improvement as well as the slippage of the organization over time. Note that the peer organizations also improve over time, which continually alters the reference points.

7 Simplify management decisions
Benchmarking and gap analysis provide essential facts for sound management decisions. A study that includes various IT staff with detailed data collection enables management to identify shop-floor changes in order to improve key performance indicators.

8 The right priorities
The information from the benchmark study will help prioritize improvement projects based on peer comparisons. This way, an organization can put greater weighting on key aspects within the model to reflect areas of greater importance to them.

9 Help an organization to be effective (do the right things)
Every organization changes over time and the project portfolio is under continual pressure. Indeed, many projects don’t even make it to the end. This is why organizations continually need to check and test the relevance of their current plans.

An evidence-based and prioritized project list is a solid basis for management to decide whether projects are on track or not.

10 Performance dashboard
Eventually we will be able to offer every participating member of itSMF who are benchmarking their own performance, a dashboard on their own internet pages, activated by online software with an annual subscription. The questionnaires will be online available throughout the year and after external validation (needed for quality assurance) the database will be updated. Every three- or six-months we will freeze the results and update the online dashboard. This will show current and past performance and the results of the selected reference group.

Of course, the standardized PDF reports will still be available for individual review and analysis by the external consultant to summarize the recommendations and add their views and comments.
WHO WILL BENEFIT FROM THE ITSMF BENCHMARK?

Each IT service management organization
The itSMF benchmark is a practical and comprehensive toolset to create evidence-based performance improvement plans that lead to improved ITIL processes and improved cost efficiency. It provides standardized definitions and metrics for key performance indicators and best practices. As all consultancies can use it, there will no longer be a requirement to compare apples and oranges.

This low-cost analysis makes benchmarking available to small and medium-sized organizations. By completing the itSMF benchmarking questionnaires, with onsite assistance and validation, an organization will benefit from peer comparisons which will help them identify their local strengths and improvement opportunities.

The itSMF benchmark is the only available independent benchmark that enables organizations to choose the assisting (accredited) consultancy themselves. In order to gain accreditation, consultancies need to be an itSMF member and should have qualified ITIL consultants. This means the consultants should be ITIL service managers who have received ISO 20000 training.

The itSMF benchmark assures constant quality, and independent and anonymous storage of data.

Consultancies
The itSMF benchmark is a shared service centre for IT service management assessments and benchmarks. The data is stored in a central database. High quality benchmark reference groups will be created based on anonymous data within the growing database. Organizations participating in the benchmark project need to join as a partner in this initiative.

ITIL V2 and V3 recommend measurement and benchmarking as part of sound IT service management. Larger consultancies often have their own toolset to assist clients in identifying improvement opportunities. The itSMF benchmarking initiative enables smaller consultancies to also access similar tools. This enables the benefits of benchmarking to underpin more studies, leading to improved IT service quality projects and outcomes. The itSMF benchmark provides a practical assessment of IT processes as they are currently in use. The approach builds on and expands existing process frameworks. The project will expand and contract as our members dictate the direction of the service. This means that consultancies will have access to this practical tool-kit without the need for local resources and investment.

itSMF and local chapters
The Intellectual Property Rights of itSMF benchmarking are fully owned by itSMF Netherlands. This means that we can now share market trends and best practice with all of our ITSMF colleagues around the world free of charge. This valuable research database will help itSMF identify performance gaps and, consequently, focus events on these specific areas. In turn, this will increase the overall quality of service management within all organizations, thus fulfilling our main goal.

Key to success is the combination of vendor and non-vendor members producing service improvement plans, based on a practical and collaborative model that is kept current by the itSMF community. Local itSMF chapters who embrace and support itSMF benchmarking will
share in the revenue of this service. They will also be able to contribute by analyzing local (anonymous) data to identify local trends. In addition, the local itSMF chapter will provide a stand and a presentation slot at their annual conference. This will enable local itSMF members to see the evidence of IT service management developments in their country, compared to what is happening across the world. The project initiators are keen to hear from members who want to contribute ideas and join the benchmarking committee.

THE MODEL

General questions
Besides obvious information such as contact details, the benchmark maps the customer’s IT environment, to enable comparison to other companies. It is a widespread misunderstanding that companies can only be compared to other companies of the exact same type. Comparison of the dealing room of bank A with the branch network of bank B would prove inconsistent even though both are banks. The same can be said about comparing traveling sales staff with the administration at a large centrally oriented company. Not being able to share and compare generic parts of IT would make it impossible to have a healthy outsourcing business sector. That is why the benchmark compares generic parts of the IT organization, which is a big and important part of the day-to-day business. Creating reference groups will be a delicate but important role of the shared service center.

The benchmark also registers what type of policy is used (innovator, fast follower, follower). In the long run, this will enable an assessment of the policy’s impact on cost and quality.

The most important point is that itSMF benchmarking is not self assessment. A registered external consultant validates the responses to the questions and performs audits to ensure the data is of high quality. It is important that all data is of high quality for benchmark accuracy purposes, sound strengths, opportunity assessment and credible recommendations.

Process benchmark
The process benchmark adopts ISO/IEC 20000, with some improvements. For example, continuity and availability management have been split into two separate processes and operations management has been added.

The process maturity component builds upon ISO/IEC 20000 and ITIL V2. It focuses on CMMI maturity levels 1 - 5. The comprehensive process study covers eighteen key IT processes. The itSMF benchmark provides simple questions that can be answered by simple answers, indicating to what extent the process is being followed:

- 0% - no/nothing
- 25% - little/some
- 50% - halfway
- 75% - many/mostly
- 100% - yes/fully

This guarantees simplicity as well as sufficient granularity, while evidence will be checked by the selected consultant.
As figure 1 shows, the questions vary between a simple predefined list of answers in percentages, and a checklist of sub-questions which show what an organization does in more detail. The number of questions can be adjusted to the needs of the processes being developed in the marketplace. Sub-sets can be extracted to suit particular applications. The questions and format are under the control of the benchmarking committee. In 2008, the questionnaires will become available in an internet-based toolset.

Every questionnaire ends with an overall question on the evidence and the quality of the answers. This helps the shared service centre to select high performing organizations for reference groups.

Figure 2 provides an example of an incident management result sheet. The first column shows the organization being benchmarked and the second columns shows the reference group, indicating the relative position of peer organizations. When a questions is scored below 75%, the response will be marked, indicating additional effort is required. On the right there is a priority indicator and the relevant maturity level. Indicators to the right will also show ISO/IEC 20000 part 1 or 2 questions.

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**04 Analysis and diagnosis**

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<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>IM 525</td>
<td>Solutions from earlier malfunctions are looked at when solving malfunctions</td>
<td>25%</td>
<td>47%</td>
<td>2</td>
<td>M1</td>
<td></td>
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<tr>
<td>IM 530</td>
<td>Incidents are analysed (researched)</td>
<td>100%</td>
<td>80%</td>
<td></td>
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<tr>
<td>IM 535</td>
<td>There is a set procedure for performing an analysis</td>
<td>75%</td>
<td>58%</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>IM 540</td>
<td>When analysing incidents use is made of:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM 545</td>
<td>Incidents database</td>
<td>100%</td>
<td>100%</td>
<td>1</td>
<td>M3</td>
<td></td>
</tr>
<tr>
<td>IM 550</td>
<td>CMDB</td>
<td>9%</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM 555</td>
<td>Documentation</td>
<td>100%</td>
<td>88%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM 560</td>
<td>Know-how of colleagues</td>
<td>100%</td>
<td>88%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM 565</td>
<td>Know-how available on websites</td>
<td>100%</td>
<td>88%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM 570</td>
<td>Other, namely</td>
<td>9%</td>
<td>31%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM 575</td>
<td>The analysis of incidents and recording of the diagnosis is registered according to the specifications</td>
<td>75%</td>
<td>70%</td>
<td>2</td>
<td>M4</td>
<td></td>
</tr>
<tr>
<td>IM 580</td>
<td>The analysis is reported on.</td>
<td>50%</td>
<td>61%</td>
<td></td>
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</tr>
<tr>
<td>IM 585</td>
<td>The way in which incidents are analyzed is adapted in a controlled manner when changes in circumstances require it.</td>
<td>100%</td>
<td>68%</td>
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</tbody>
</table>

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Figure 1 Example question sheet incident management

Figure 2 Example result sheet incident management
Performance
Within the process maturity component, itSMF benchmarking includes a number of service quality measures. These help to develop and compare an organization's service level targets against leading organizations, in the appropriate reference group. A number of performance metrics have been taken from the popular book “Metrics for IT Service Management” (Brooks, 2006). The relevant pages from the book have even been included in the questionnaire. The most important performance metrics can be identified by an exclamation mark (“!”) before the question. The benchmark also requests information on if and when organizations measure the performance metrics (standard, occasionally, sample) or whether it is an estimate (reliable, average, unsure). All questions marked with “!” must be answered.

<table>
<thead>
<tr>
<th>10 Service Level Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>SLPF 0a                     ! Number of operational SLAs</td>
</tr>
<tr>
<td>SLPF 0b                     ! Percentage of services covered by SLAs</td>
</tr>
<tr>
<td>SLPF 001 131                ! Number of SLA targets missed</td>
</tr>
<tr>
<td>SLPF 002 131                ! Number of SLA targets threatened</td>
</tr>
<tr>
<td>SLPF 003 132                ! Percentage of SLAs that require changes</td>
</tr>
<tr>
<td>SLPF 004 132                Number of SLA reviews completed on time</td>
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<tr>
<td>SLPF 005 133                Number of SLA breaches caused by third party support contracts</td>
</tr>
<tr>
<td>SLPF 006 133                Service Delivery costs</td>
</tr>
<tr>
<td>SLPF 007 134                Number of services not covered by SLA</td>
</tr>
<tr>
<td>SLPF 008 134                Number of OLAs and Underpinning Contracts not yet agreed upon</td>
</tr>
<tr>
<td>SLPF 009 134                Customer Satisfaction</td>
</tr>
<tr>
<td>SLPF 010 135                SLA -&gt; SLA turnaround</td>
</tr>
</tbody>
</table>

Figure 3 Sample questions with exclamation marks

Total cost of ownership
In order to obtain a balanced view on best practice, the itSMF benchmark also has a unit cost component. Total Cost of Ownership (TCO) is calculated by using standard and proven technology benchmarking. This TCO includes all IT staff and the main infrastructure hardware and software elements. Using a standard high level model, the itSMF benchmark enables unit cost comparisons between the organization that is being benchmarked and a similar sized reference group. We aim to get 80% of the benefits using 20% of the traditional data. The itSMF benchmark requires information on:
- workload
- staff
- current year IT revenue and capital budget
- ongoing infrastructure projects
- departmental IT budgets

This information enables the benchmark to define a high level unit cost (an organization’s TCO) and a number of unit costs in areas such as service desk, client server, and data network. Figure 4 shows the reference group value as 100% and the organization’s value relative to it.

Project management
Organizations invest heavily in projects to deliver business benefit. The project management benchmark enables projects to be measured and compared. Best practice within project
management will be identified and shared across the itSMF community. The itSMF benchmark offers a service that is designed to benchmark projects based on size and type (hardware migration, software migration, sourcing, process improvement, re-organization).

**Tools**

Tools play a critical role in providing day-to-day IT service management. For this reason the itSMF benchmark will collect information on which tools are in use at different kinds of organizations. This will be used to underpin process and TCO information. And in the (near) future partners will be able to offer an interface between the itSMF benchmark and the database of their tools so data can be collected continuously and easily.

**THE BENCHMARKING PROJECT**

When undertaking an itSMF benchmark, an organization selects an appropriately accredited consultancy to support them through the study. If their current preferred supplier is not accredited they can contact the shared service centre to become a partner. The lead consultant receives the itSMF benchmark questionnaire and is the single point of contact with the shared service center, in the Netherlands. The consultant ensures the correct answers are reported and provides local support for questions and answers. Once the questionnaires are completed and checked on-site, the lead consultant sends the information to the shared service center for processing. The results from the center will include the organization’s data, plus processed information such as key performance indicators. This information is cross checked at a validation session, at which final data corrections are made.
The final version of the data will be processed again and the lead consultant will use the final itSMF benchmarking report to create the organization’s report and presentation.

**Quality assurance**
The itSMF benchmark model has proven its quality and value for many organizations. The itSMF NL is keen to keep the model up-to-date and relevant. To do this, there is an established program for quality assurance. The benchmarking committee consists of leading consultancies in The Netherlands in the area of ISO/IEC 20000, ITIL, CMMI, TCO, tooling, project management and (international) benchmarking.

We now seek to increase the number of international members in the committee, not only consultancies but also IT service management organizations. We are specifically looking for operational process owners with an ITIL service management certificate and ISO 20000 experience.

The board of itSMF Netherlands currently acts as an advisory board ensuring that focus is maintained on the best strategy for the itSMF benchmarking service. They can invite the international board to join this board as well. The benchmarking committee aims to have periodic independent audits to highlight strengths and areas where we need to improve further. Auditors should have no links to benchmarking models now or in the future, as this would possibly violate their non-disclosure agreements.

At an operational level, two months after a benchmark has been completed we will send all organizations a client evaluation form. In this evaluation we invite feedback on the results of the itSMF benchmark, the model, the consultants and the process. A formal audit and complaint procedure is in place to understand and address any issues of conduct and duty. This will link with itSMF NL, which will provide adjudication as necessary. Over time, an itSMF benchmarking user group is envisaged as a community to share best practice and metrics-based innovation. In addition, a consultancy user group is also envisaged to provide colleague support for studies. All activities under the banner of itSMF benchmarking seek to serve one greater goal: to create the best possible IT service management measuring environment.

**PITFALLS IN BENCHMARKING**
In benchmarking, try to avoid the following pitfalls:

- **Garbage in, garbage out** - Try to get the best possible answers so the results and recommendations will reflect reality.
- **Do nothing** - A solid set of recommendations may be presented in a well defined report or presentation. If management decides not to take action, however, this will certainly demotivate staff and result in unsatisfied users.
- **Underestimating the impact** - Senior management understands the true value of benchmarking and will certainly look at the study results. It is important that the results reflect the actual situation and that appropriate action is taken to address issues that have been identified. If this is not the case, an organization will be doing the wrong things. Please note that the use of external consultants for quality assurance should minimize this.
- **Difference in scope** - If the benchmark study is looking at one part of the organization, ensure all people involved are clear about the specific scope of the study when answering the questionnaires.
• **Comparing against average performance** - This hardly ever leads to best practice.
• **Unavailable root-cause analysis** - You need to be able to track your recommendations to key performance indicators and the underlying data provided, in order to adjust the situation on the floor.
• **Weak project management** - Good data collection and validation are key to a successful benchmarking project. The project manager in charge needs to motivate the participants continually and manage the project within a short period of time in order to ensure that people stay focused. This, in turn, reduces the overall effort.

**FINALLY**

There is no better peer than yourself. Benchmarking your own performance over time shows the positive results of your service improvement plan and charts your route to becoming a best practice organization. This is particularly useful when you are audited and you can demonstrate sound management of your performance and unit costs over time.

As the database grows, we can share the results with the itSMF community in terms of industry trends and more reference groups. This is an itSMF initiative designed by itSMF members for itSMF members. It enables IT service organizations of all sizes to improve service provision at an affordable cost. This levels the playing field with the largest organizations that have used benchmarking for many years to improve their performance.

The initiative is about one year old and the amount of interest has astonished even ourselves. More and more organizations are joining the initiative. For more information please refer to www.itsmf-benchmarking.com.

**Jan Sonneveld** (The Netherlands) is founder and chairman of the itSMF benchmark. He is managing director of Q-monitor and a benchmarking specialist.

**Martin Boyle** (United Kingdom) is director of IT Perceptions and specializes in IT service management, enterprise architecture and benchmarking.

**Leo van Selm** (The Netherlands) is director of Vaseom and a specialist in IT service management, especially ITIL, ISO/IEC 20000 and training/certification.

**Maarten Verstralen** (The Netherlands) is senior consultant for CORED and a specialist in IT service management, TCO and metrics.

**Simon Bos** (The Netherlands) is Tactical Partner at Bos+Cohen and specializes in IT service management, ITIL, ISO/IEC 20000 and tooling.

**Ton Alofs** (The Netherlands) is director of Steenbok Adviesgroep and a specialist in IT service management, ITIL and maturity.

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