

Managed Services for ITBI | Mainframe Outsourcing Health-Check | Mainframe Cost Optimization | FinOps: Mainframe Cost Distribution | Before and After Study | The Journey to Tailored Fit Pricing | DevOps Optimization | Evaluation of Distributed Workloads on MIPS Usage | Mainframe Modernization Advisory | Understanding the Mainframe "Offload Boomerang"



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We are SMT Data

SMT Data is an independent IT company that helps large organizations and outsourcers worldwide optimize their utilization of mainframe systems. With no external ties or obligations, our sole mission is to help you understand, manage, and prioritize your mainframe capacity consumption. Our independence ensures objectivity, efficiency, and agility. We make your consumption transparent overnight, enabling you to benefit from reliable, fact-based insights.

Our Solution – ITBI™

Our ITBI™ solution is fully compliant with international regulations and security standards, particularly in the financial services industry. Our client base includes global mainframe companies from a wide range of industries.

Our Services

We offer a broad range of services and can support you with your mainframe system, whether you're an existing ITBI customer or not. To execute our offerings, we use ITBI as a Service (ITBIaaS) which operates in the cloud. If you're not already a customer of ITBI, we will temporarily make an ITBI installation for you, which you can easily feed a limited and defined scope of SMF data into for our consultants' analysis work.

We pride ourselves on having some of the world's most renowned experts in mainframe capacity and performance management. Our experienced consultants assist with both small and large projects, helping enhance IT infrastructure transparency and drive specific initiatives.

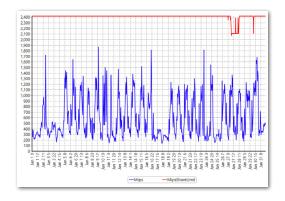
In addition to our main services, we offer specialized ad-hoc consultancy across various sub-disciplines within capacity and performance management. We can enhance your internal team with highly qualified expertise in areas such as z/OS, Workload Manager (WLM), Coupling Facility, DB2, CICS, MQ, WAS, disk, tape, and more.

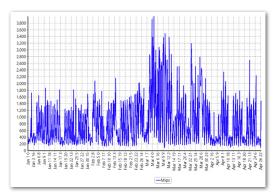
Our consultants have extensive experience working with a variety of industries – essentially any organization using a mainframe installation.

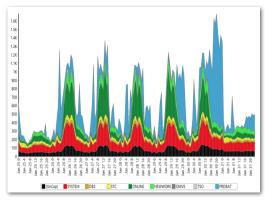
How can we help you?



Managed Services for ITBI







With the ITBITM Managed Services for IBM Z we help ensure that you maximize the benefits of your ITBI Solution. These services reduce the need for in-house resources and skills and can also transfer skills to your staff. Managed Services allow you to focus on daily tasks while achieving strategic continuous optimization of your IT infrastructure.

Objective

The objective of our Managed Services is to provide ongoing analysis of the capacity and performance characteristics of your installation. Regular meetings between you and SMT Data are held to review findings and recommendations based on the ITBI solution. These services aim to help you achieve cost savings through continuous capacity and performance optimization, while also ensuring skills transfer so your staff can fully leverage the ITBI solution.

What we will deliver

- ► **Start-up Workshop**: Initial workshop with you to agree on any specific reporting requirements.
- ▶ Ongoing Performance and Capacity Assessment: Continuous evaluation of your environment by SMT Data consultants, with reporting of any significant anomalies.
- ► Customer-Specific Reporting: Regular assessment and updates of customer-specific reporting requirements as agreed during the startup workshop.
- ▶ Regular Review Meetings: Monthly or quarterly meetings between you and consultants from SMT Data to review findings and recommendations. These meetings include standard presentations with specific tuning or cost savings recommendations and follow-up on previous recommendations. They also serve as a platform for skills transfer to your staff in using ITBI.

Time frame

This is an ongoing service with monthly or quarterly meetings.

Prerequisites

A SMT Data consultant should have access to your ITBI installation to complete this service.





Mainframe

Outsourcing Health-Check

If you feel like you lack the necessary data or expertise to effectively communicate with your outsourcer or validate billing accuracy, the Mainframe Outsourcing Health-Check service will help you. The service provides you, who's an outsourced mainframe customer, with crucial insights into how effectively your outsourcer is managing mainframe capacity and performance. The service aims to bridge the gap between you and your outsourcer by analyzing capacity and performance data, ensuring that invoicing and management practices are fair, transparent, and aligned with industry best practices.

Objective

The objective of the Mainframe Outsourcing Health-Check is to evaluate and improve the transparency of mainframe capacity and performance management under an outsourcing agreement. By examining capacity data and billing models, we seek to answer critical questions such as whether invoicing accurately reflects usage, if the agreed methods align with best practices, and what optimization opportunities exist. The goal is to potentially reduce costs, improve performance, and ensure fair and transparent billing.

What we will deliver

- ► Data Analysis Report: Analysis of capacity data (SMF) and billing models using ITBITM, providing answers to key questions such as:
 - Does the invoiced capacity (e.g., MIPS) match the measured usage from the SMF data?
 - Are the methods used by the outsourcer for calculating capacity and billing in line with the agreed terms and industry best practices?
 - What are the advantages and disadvantages of alternative capacity measurement methods?
 - What are the major technical and business contributors to capacity usage?
 - Where are the potential areas for optimization and what specific actions can be taken to achieve savings?
 - Are there performance issues like poor response times, and what are the options for addressing these?
 - What are the ongoing reporting requirements to ensure transparency between you and your outsourcer?
- ▶ Review and Discussion: Initial review of findings with you, and, optionally, with your outsourcer, to ensure conclusions are based on a correct and complete understanding of the data and agreements between you and your outsourcer.
- ▶ Final Report and Roadmap: A comprehensive final report covering the objectives outlined, including a roadmap for implementing further actions.
- ▶ ITBI Reporting Access: You (and potentially your outsourcer) are given access to the ITBI reporting environment to gain handson experience with your data.

Time frame

1-2 months depending on the time required to establish the prerequisites.

Prerequisites

You provide the required capacity and performance data to SMT Data. This typically means SMF types 70, 72 and 30 for at least one full month plus SMF 101 and 110 for selected peak days. You should also provide input to business mapping to help translate technical information like job or transaction names to business information such as department or application.

You should provide information regarding the technical computation methods agreed with your outsourcer for determining the capacity usage, and provide the actual measurements and computations that form the basis for the invoice matching the period for which SMF data has been provided.



Mainframe Cost Optimization

The Mainframe Cost Optimization service focuses on delivering significant cost savings through comprehensive analysis and optimization of the your mainframe environment. By leveraging ITBI™, SMT Data identifies and addresses key cost drivers assisting you in implementing recommended optimizations.

Objective

The objective of this service is to achieve substantial cost reductions by thoroughly analyzing the mainframe setup and cost drivers. Using ITBI, SMT Data performs a detailed analysis, pinpoints specific areas for optimization, and supports you in executing these recommendations.

What we will deliver

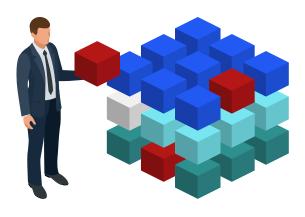
- ► Cost Driver Analysis: Identification of the top cost drivers using ITBI and other capacity and performance analysis tools.
- ► Optimization Opportunities Documentation: Detailed documentation of optimization opportunities, including analysis, potential risks, and expected benefits.
- ► Solution Document: A comprehensive document for each identified opportunity, outlining the nature of the change, completed analysis, associated risks, and expected benefits
- Measurement Report: A report for each implemented change to confirm its impact and commercial value for both you and SMT Data.
- ► Weekly Reporting: Regular weekly reports tailored to your requirements throughout the project.

Time frame 3-6 months depending on the size and complexity of your organization and cost structure.

Prerequisites

We need access to your mainframe environment including any performance or capacity tools available in that environment.

Your staff should be available for interviews or to answer questions about the technical setup of the mainframe.





FinOps:

Mainframe Cost Distribution

The FinOps: Mainframe Cost Distribution service is designed to create transparency into mainframe cost drivers, both in technical and business terms. This transparency helps ensure accountability and behavior alignment across relevant business units. It is valuable both for you as an outsourcer charging customers based on utilization, if you are an outsourced customer, or if you have an installation with your own mainframe seeking internal show-back or charge-back. The service assists in implementing or enhancing cost distribution methods to accurately reflect the underlying costs and provide a clear overview of usage and expenses.

Objective

The goal of this service is to establish a fair, transparent, and accurate mainframe cost distribution system. By understanding and mapping cost drivers—typically based on peak monthly utilization – the service provides a clear picture of how each business unit contributes to those costs. It includes addressing the challenge of distributing overhead costs fairly and ensuring that self-service reporting is available. This allows organizations to independently understand their costs and manage them effectively without relying on mainframe staff for constant support.

What we will deliver

- ► Cost Distribution Rules Setup: We collaborate with you to establish the rules for mapping technical terms to business terms in ITBI™, including explicit allocation of capacity usage and implicit distribution of overhead costs.
- ► Reports and Dashboards: Required reports and dashboards are created to assist:
 - ♦ IT Finance in preparing monthly charge-back or show-back reports.
 - ♦ Business units in understanding their charges, the reasons behind them, and strategies for cost reduction.
 - IT operations in explaining capacity usage to the business units.
- ▶ Iterative Implementation: Ongoing improvement of mapping and reports through iterative monthly updates based on stakeholder feedback, ensuring continuous refinement and alignment with actual costs.

Time frame

The timeframe depends on the size and complexity of your organization and cost structure. Cost distribution is normally implemented in an iterative approach, where the initial reports are available for review within the first month.

Prerequisites

Our consultants require access to interview key employees of your staff in order to understand what you're paying for, any cost distribution models currently in place, and any reporting requirements from the various stakeholders.

Before and After Study

The Before and After Study with ITBI™ is designed to support you through major infrastructure transitions, such as technology upgrades, data center moves, outsourcing, cloud migrations, mergers, or acquisitions. By leveraging ITBI, this service provides a detailed, fact-based analysis of capacity and performance before, during, and after the transition, enabling informed decision-making and effective management of the transition process.

Objective

Infrastructure transitions often involve significant uncertainty, with many decisions made based on educated guesses rather than solid data. This service aims to eliminate guesswork by providing a comprehensive understanding of the potential costs, benefits, and trade-offs associated with the transition. It helps customers identify necessary optimizations or rightsizing efforts before the transition, monitor the results during the transition, and assess the outcomes afterward. This approach ensures that decisions are grounded in factual data, allowing for better management of capacity and performance throughout the transition.

What we will deliver

► Pre-Transition Analysis:

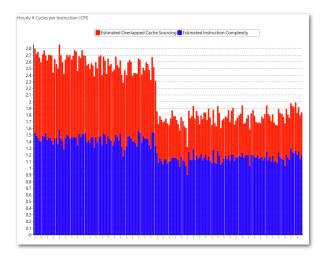
- Collection of performance and capacity data from the existing mainframe and server environments.
- Identification of optimization or rightsizing opportunities to improve the new environment's efficiency.
- Analysis of current utilization patterns to optimize workloads and consolidate or adjust server infrastructure in preparation for the transition.

During Transition Monitoring:

- Ongoing monitoring of the transition process using ITBI to ensure that optimization efforts are effective and to capture any immediate impacts.
- Real-time insights into the behavior of new configurations and technologies as they are implemented.

► Post-Transition Evaluation:

- Assessment of whether the transition objectives were achieved, including cost savings and performance improvements.
- Identification of any unforeseen issues in the new environment and their root causes.
- Recommendations for further optimization or rightsizing based on the results observed post-transition.
- ► ITBI Access: You are granted access to the ITBI environment on a cloud server for further analysis or to gain a deeper understanding of the findings and recommendations.



Time frame

3-6 months in total. Each of the three phases takes 1-2 months. The phases can be carried out as one or three separate projects.

Prerequisites

The Customer provides SMF data from the mainframe environment and a server and the necessary authorizations for installation and execution of the collector software for the server environment.

The Journey to

Tailored Fit Pricing

The Journey to Tailored Fit Pricing (TFP) service help you transition from your current mainframe billing model to IBM's Tailored Fit Pricing, which charges based on total CPU usage over a month rather than peak usage. By analyzing current and historical performance and capacity data, we will provide independent, fact-based guidance on how TFP can impact your environment, including potential benefits, necessary changes, and optimization opportunities.

Objective

The objective of this service is to guide you through the transition to Tailored Fit Pricing by evaluating your historical and projected usage patterns, understanding the implications of TFP on capacity and performance management, and identifying the necessary changes and optimizations. This includes assessing the potential commercial benefits and pitfalls of adopting TFP, and providing a clear strategy for implementing and optimizing this new pricing model.

What we will deliver

- ▶ Current Usage Patterns Analysis: We gather performance and capacity data from your mainframe environment to understand the current and historical usage patterns, including SCRT reports and SMF data, which then are securely offloaded to ITBlaaS for detailed analysis.
- ► Current Setup and Objectives Workshops: Conduct workshops to review:
 - The existing licensing model and associated costs.
 - Projected capacity usage and planned changes in your environment.
 - Your objectives for considering TFP, such as cost savings, flexibility, and predictability.

- ► Analysis and Recommendations Report: A detailed presentation including:
 - Potential benefits and disadvantages of moving to TFP from the current billing model.
 - Recommended structure for the TFP agreement based on your topology and expected usage patterns, including considerations for workload segmentation and IPLA products.
 - Suggested optimizations and changes before and after transitioning to TFP, such as workload flattening during the baseline period and identifying new optimization opportunities post-transition.
 - Impact of growth in capacity usage on current billing and TFP pricing, including considerations for pricing curves and discounts.
- ► Findings Review Workshop: A workshop to review the findings and recommendations, discuss next steps, and refine the strategy based on customer feedback.
- ▶ ITBI Access: You are given access to the ITBI environment on a cloud server for a period of one month to do further analysis or better understand the findings and recommendations.

Time frame

This project normally takes 1-2 months depending on the size and complexity of the installation.

Prerequisites

Your provide SMF data and SCRT reports from the mainframe environment. You also provide qualified staff to participate in the workshops and answer questions along the way.





DevOps Optimization

The DevOps Optimization service focuses on enhancing the agility of getting applications into production by understanding and managing the performance and capacity considerations of these applications on the mainframe. Using ITBITM, this service provides transparency into application-specific capacity usage, helping bridge the communication gap between the development and operations teams regarding the impact of applications on mainframe costs.

Time frame

1 month including 2 workshops. The kick-off workshop is normally held at project start and a follow-up workshop one month later. Additional workshops can be held monthly or quarterly after that, if you wish to continue the service.

Prerequisites

Our consultants require access to interview your staff from both Operations and Development in order to implement application mapping and develop custom reports.

Objective

The objective of this service is to create a common understanding between developers and operations staff regarding how the current application portfolio and any changes to applications affect mainframe capacity costs. By providing detailed insights into capacity usage and performance, the service aims to facilitate informed decision-making and effective cost management.

What we will deliver

- ► Kick-off Workshop: Initial workshop to review technical reporting on capacity usage from ITBI™ and agree on mapping technical dimensions (e.g. transactions, jobs, packages, users) to specific applications. This workshop will also:
 - Identify important cost drivers, such as applications contributing to peak utilization.
 - Provide basic training on using ITBI to analyze mainframe capacity and performance.
- ► Custom Reports Implementation: Custom reports are created based on the mapping agreed upon in the kick-off workshop. These reports will address specific operational and development challenges and provide insights into cost optimization opportunities.
- ► Report Review Workshop: A subsequent workshop to review the new reports, discuss findings, and evaluate recommendations for cost optimization activities.
- ► Ongoing Meetings: Regular (monthly or quarterly) meetings to:
 - ♦ Identify new optimization opportunities.
 - Follow up on the status and impact of previous recommendations.
 - Continuously improve mapping and reports based on stakeholder feedback.



Evaluation of Distributed Workloads on

MIPS Usage

The Evaluation of Distributed Workloads on MIPS Usage service aims to provide transparency into how distributed systems impact mainframe capacity, specifically focusing on the mainframe's peak utilization driven by external workloads. This service seeks to bridge that gap by analyzing and optimizing the interaction between distributed platforms and the mainframe. Developers will gain clear visibility into the mainframe's resource consumption, making it easier for them to manage their distributed systems, and mainframe operations staff will find it much simpler to handle incoming workloads efficiently.

Objective

The objective of this service is to create transparency into the interaction between distributed systems and the mainframe, with a focus on how distributed workloads impact mainframe MIPS usage. By identifying cost drivers and understanding the end-to-end impact, the service provides actionable recommendations to optimize and reduce mainframe resource consumption. This offering focuses broadly on all distributed workloads, not just recently offloaded ones.

What we will deliver

- ► Impact Analysis Using ITBI™:
 - Analysis of distributed workloads' impact on the mainframe using ITBI, including insights from SMF 101 data on DB2 resource usage and remote data access.
 - Identification of how many MIPS are consumed by distributed workloads, and which applications, servers, and users are driving the usage.
 - Enrichment of technical data with business information, such as translating server or usernames to organizational or application contexts.

► Distributed System Evaluation:

- ♦ Interviews with your technical staff to analyze the setup on distributed systems.
- Investigation of standard software components, including version checks and configuration optimization.
- Evaluation of distributed architecture and coding practices, including the use of dynamic SQL and optimal access paths for DB2 data.

- ➤ Presentation of Findings and Recommendations: A comprehensive presentation detailing technical findings and specific recommendations to reduce mainframe resource consumption and costs.
- ► Regular Follow-Up Meetings to:
 - Follow up on the implementation of recommendations.
 - Quantify cost savings achieved.
 - ♦ Identify new findings and recommendations for further optimization.

Time frame

1-3 months depending on the size and complexity of your organization and cost structure.

Prerequisites

Our consultants require access to interview customer staff in order to understand the technical setup of both the mainframe and the distributed environment.



Mainframe

Modernization Advisory

The Mainframe Modernization Advisory service leverages ITBI™ to support partial or full migration away from mainframes by providing insights into performance and capacity impacts. This service ensures you remain on track during offloading and monitors capacity and performance baselines on both the mainframe and the receiving distributed platforms. It creates transparency around the cost and performance impacts of various offloading strategies, whether front-end functionality, single applications, or major applications are being offloaded.

Objective

The objective of the Mainframe Modernization Advisory service is to help you understand the capacity, performance, and cost implications before, during, and after a modernization project. This includes creating transparency into the real cost drivers in technical (jobs, transactions, packages) and business terms (applications, organizations). The service aims to establish a clear baseline to select the best candidates for modernization and provide ongoing validation that expected improvements are achieved.

What we will deliver

- ▶ Kick-off Workshop: Initial workshop to understand your modernization objectives and review technical reporting on capacity usage available in ITBI. Agreement on mapping technical dimensions (transactions, jobs, packages, users, servers) to applications to quantify capacity usage.
- ► Custom Reports Implementation: Based on the kick-off workshop custom reports are created identifying key cost drivers and applications contributing to monthly peak utilization to focus on impactful modernization efforts.

- ► Baseline Establishment Workshop: Review of new reports and assistance in establishing a baseline to choose, monitor, and validate various modernization options.
- ▶ Regular Follow-up Meetings: Monthly or quarterly meetings to follow up on modernization efforts, ensuring ongoing validation that expected cost savings and performance improvements are achieved.
- ► Final Review Workshop: A concluding workshop to review and quantify the actual mainframe capacity-related savings achieved.
- ► Additional Consulting: Access to SMT Datas's consulting services for transparency and control, with partners available for planning, designing, and executing the modernization effort.

Time frame

The time frame depends on the scope of the modernization project. The kick-off workshop, business mapping and baseline workshops are typically held during the first month of the projects.

Prerequisites

Our consultants need access to interview key members of your staff from both Operations and Development to implement application mapping and develop custom reports.



Understanding the Mainframe

"Offload Boomerang"

When you're moving applications from the mainframe to distributed platforms (such as Windows or Linux) and it does not achieve the expected reduction in mainframe MIPS usage you might experience the "Offload Boomerang" phenomenon. The mainframe's capacity usage can increase due to remote data access methods, which are often less efficient and more costly than anticipated. This service aims to create transparency in the interaction between distributed systems and the mainframe and provides recommendations to address and mitigate the offload boomerang effect.

Objective

The objective of this service is to gain a comprehensive understanding of how distributed applications impact mainframe capacity and to identify the factors contributing to the offload boomerang effect. By analyzing and optimizing the interaction between distributed and mainframe components, the service aims to reduce mainframe resource consumption and associated costs. This service focuses specifically on the offload boomerang, differing from broader evaluations of distributed workload impacts.

What we will deliver

- ► Impact Analysis Using ITBI™:
 - Analysis of the impact of distributed workloads on mainframe MIPS usage using ITBI, including data from SMF 101 on DB2 resource usage and remote data access.
 - Identification of how many MIPS are used by remote data access, which plans or packages are involved, and the applications, servers, and users driving this usage.
 - Enrichment of technical data with business context, such as translating server or user names to organizational or application information.

Distributed Systems Evaluation:

- Interviews with the customer's technical staff to analyze the setup on distributed systems.
- Investigation of standard software components, including version checks and configuration optimization.
- Evaluation of distributed architecture and coding practices, including the use of dynamic SQL and optimal access paths for DB2 data.

- ► Presentation of Findings and Recommendations: A comprehensive presentation detailing technical findings and specific recommendations for reducing mainframe resource consumption and costs.
- ► Regular Follow-Up Meetings to:
 - Review the implementation status of recommendations.
 - Quantify cost savings achieved.
 - Identify new findings and further recommendations.

Time frame

1-3 months depending on the size and complexity of your organization and cost structure.

Prerequisites

Our consultants require access to interview relevant staff in order to understand the technical setup of both the mainframe and the distributed environment.



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