



# itbiΣ Solution

Essentials | Standard Reports | Data Lake | Integrations & AI | Cost Allocation



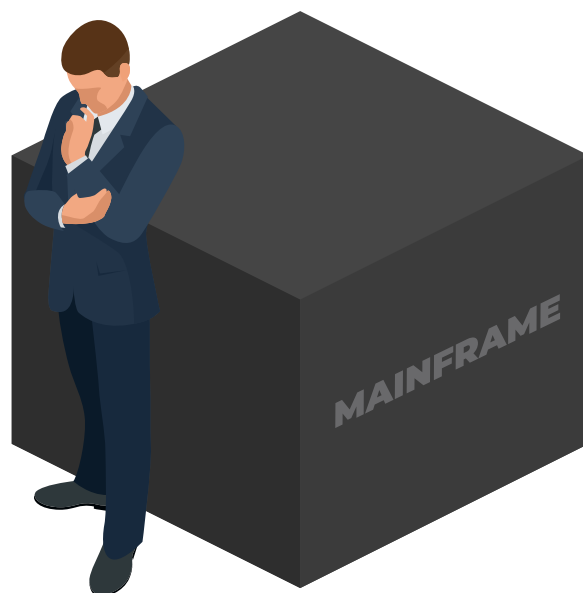
# Trust Your Mainframe Insights

---

**Gain complete technical and financial transparency of your mainframe with ITBI™ by SMT Data.**

SMT Data is an independent IT company that helps large organizations and outsourcers across the world with mainframe optimization and utilization. We have no ties or obligations and only one agenda: To help you understand, use and prioritize your data consumption.

Our solution – ITBI™ – is compliant and certified according to the highest standards. On average, ITBI saves our clients 10-15% of their IT consumption.



# Essentials

---

ITBI™ transforms your mainframe data into reliable insights for optimizing capacity and performance, driving business success. The system offers detailed visibility into resource usage across your organization, identifying who is using which resources and to what extent.

The solution features a comprehensive suite of standard reports that enables you to pinpoint cost drivers, identify performance bottlenecks and detect changes affecting cost or service quality. In addition, ITBI enhances your technical data with business dimensions, promoting transparency in the relationship between capacity costs and business activities.

ITBI's intuitive design provides an easy-to-navigate user interface. It includes features such as report search, favorites, user administration capabilities and a dedicated Help Universe for support.

ITBI empowers advanced users to customize analyses by creating or modifying reports and queries, tailoring the solution to meet specific needs. Moreover, ITBI ensures security and compliance with industry best practices and legal mandates delivered as a cloud-based solution: ITBI as a Service (ITBIaaS).



# Standard Reports

## Key Advantages

### 1. Extensive Report Library

- ▶ ITBI offers over 500 standard reports that cover a wide array of topics related to Mainframe sub-systems, ensuring a vast majority of reporting needs are met.

### 2. Detailed Analysis

- ▶ Users can dive deeper into data with drill-down capabilities, allowing for a more granular analysis and richer insights.

### 3. Flexible Data Export

- ▶ The platform supports easy export of data in various formats, facilitating efficient data management and sharing across systems.

ITBI™ Standard Reports empower organizations to make informed decisions and optimize their IT operations effectively within Capacity, Performance, and Cost Management.

## z/OS SMF data is transformed into actionable insights

With over 500 pre-built reports, ITBI™ enables users to perform detailed analyses through high-level overviews and granular drill-downs. The extensive report library covers various topics, including system performance, change detection, and software summaries. ITBI™ also provides flexible data export options, facilitating easy sharing and integration into various formats. The ITBI™ Portal is user-friendly, with a search function that quickly locates reports using specific keywords. Additionally, the Help Universe offers knowledge articles and guidelines to help users fully utilize the platform's capabilities.

## Customization Options for Advanced Users

ITBI™ offers the ability to create custom analyses and personalize ITBI™ user pages. With the BI Advanced or BI Developer Access license, users can generate custom reports using a desktop-based Report Builder client. For those who prefer a more hands-off approach, custom reports can also be requested from the SMT Data ITBI™ expert team. This flexibility supports diverse business needs and enhances user engagement with the data, making ITBI™ a powerful solution for tailored insights.

## Standard report coverage:

- ▶ Mainframe Hardware Configuration Overview
- ▶ System Performance Overview: WLM (Workload Management) Activities Analysis
- ▶ Subsystem Performance Analysis: CICS (Customer Information Control System), DB2 Plan and Package Performance, DDF (Distributed Data Facility) Performance, IMS (Information Management System), WAS (WebSphere Application Server), MQ (Message Queue) Management, zConnect
- ▶ Memory Overview
- ▶ Disk Storage Occupancy
- ▶ Billing Reports, including TFP (Tailored Fit Pricing)



# Data Lake

The ITBI Data Lake is a powerful feature designed to enhance your analytical capabilities by providing a flexible and accessible repository for your SMF data. The Data Lake streamlines the process of accessing and utilizing your data, making it easier to conduct in-depth, meaningful analyses.

## Access and Utilization

It allows you to write simple scripts to extract and analyze SMF interval data, enabling deep-dive analysis tailored to specific needs. All of your data is decoded and stored in the Data Lake, ensuring that it is readily available for analysis at any time. The Data Lake can be accessed using a variety of tools, including SQL, R, SAS, and Python, offering users the flexibility to work with their preferred platforms.

## Contents of the Data Lake

The Data Lake contains three types of data arrangements:

- 1. Raw SMF Files:** These are the original SMF files provided by the customer, stored exactly as received.
- 2. Raw SMF in Tables:** This includes nearly all fields from all supported SMF types, mostly decoded, and organized following the standard IBM SMF naming conventions.
- 3. View Tables:** The most useful variables have been pre-selected and organized into view tables and organized following the standard MXG naming conventions. This setup reduces the time needed to find key variables for generating reports, ultimately saving you time and making your data analysis process more efficient and user-friendly.

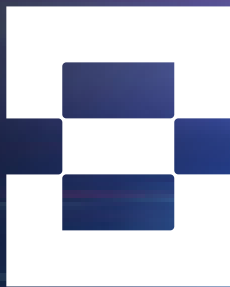
## Applications of the Data Lake

The Data Lake serves various functions, from reporting on recently received data within minutes of its arrival in ITBI to analyzing fields and details not included in the ITBI Data Cubes, which supply the standard reports with data. It supports event-based data reporting and the implementation of complex logic or calculations that are not feasible within the standard BI reports. In addition, it facilitates the creation of graphics or formatting not supported by the BI reports.

Specific use cases include detailed reporting on fields and events obscured in aggregated data and leveraging existing SAS/MXG expertise. These applications, particularly effective for those with a solid understanding of both SMF and MXG structures, maximize the utility of the Data Lake.

## Key Advantages

- |   |   |   |
|---|---|---|
| <b>1. Direct and Immediate Data Access</b> <ul style="list-style-type: none"> <li>▶ Access a diverse range of data directly through the ITBI portal using Amazon Athena, enabling quick ad hoc queries and prototyping for faster insights and decision-making without delays.</li> </ul> | <b>2. Comprehensive Data Inclusion</b> <ul style="list-style-type: none"> <li>▶ From structured MXG-like tables to raw SMF files, the Data Lake covers a comprehensive range of data types, ensuring user access to both high-level summaries and detailed information for various analytical needs.</li> </ul> | <b>3. Versatile Integration and Programming Support</b> <ul style="list-style-type: none"> <li>▶ Support for remote ODBC connections allows seamless integration with programming languages like SAS/MXG, enhancing the reuse of existing programs and expertise while facilitating integration with other systems for expanded utility.</li> </ul> |
|---|---|---|



# Lakeview

---

## LakeView – Visual Analytics Layer

LakeView extends the ITBI Data Lake with a dynamic visualization and dashboard environment built on Apache Superset. It provides a flexible, near real-time interface for exploring Data Lake content and for presenting analytical results in a clear and interactive format.

- Operating directly on the Data Lake's decoded and structured data, LakeView allows users to:
- Create and share interactive dashboards and charts using predefined or ad-hoc SQL queries.
- Perform drill-down analyses on specific performance or capacity indicators derived from SMF data.
- Access near real-time views when new data becomes available, helping users identify developing situations sooner.
- Combine operational and business metrics logically within a single visualization framework for faster interpretation and collaboration.
- Supports SQL

This layered approach ensures that users can move fluidly from raw data exploration to high-level visualization and decision support without leaving the ITBI environment.

# Integrations & AI

ITBI™ integrates with custom data sources, advanced presentation tools, and Artificial Intelligence (AI) capabilities. This accessibility empowers advanced users to analyze data using their preferred tools and ensures seamless integration with both in-house and third-party systems.

## Presentation & Analysis Tool Integration

ITBI enhances data analysis through advanced analytical software such as SAS or WPS and supports ad-hoc queries essential for informed decision-making. The platform supports a variety of programming languages and software frameworks through remote ODBC connections. This capability not only promotes the reuse of existing programs and expertise but also facilitates seamless integration with diverse systems.

ITBI's broad compatibility enhances its practical applications and utility, ensuring robust data handling and extraction capabilities. Furthermore, the integration with third-party presentation tools not only boosts the analytical capabilities but also ensures that data insights are effectively communicated across platforms.

## AI & Machine Learning Integration

ITBI embraces cutting-edge technologies, integrating Machine Learning (ML) and AI tools for advanced predictive analytics and intelligent data processing. Supporting a comprehensive range of analytical tools – including SAS, WPS, SQL, Python, R and Julia – ITBI enables every data analyst and scientist to use their preferred tool, optimizing both comfort and efficiency. The flexibility in AI and analysis tool integration empowers your organization to leverage enhanced data intelligence, driving innovation and maintaining a competitive edge in the data-driven landscape.

### Key advantages

#### 1. Versatile Integration

- ▶ ITBI offers extensive flexibility for integrating with custom data sources, advanced presentation tools and AI capabilities, ensuring seamless integration with in-house and third-party systems.

#### 2. Custom Analysis Support

- ▶ ITBI facilitates detailed analyses through advanced analytical software such as SAS or WPS, supporting ad-hoc queries and diverse programming languages via remote ODBC connections, enhancing data manipulation capabilities and enabling informed decision-making.

#### 3. AI & ML Integration

- ▶ ITBI embraces ML and AI tools for predictive analytics, supporting a wide range of analytical tools such as SAS, Python and R, optimizing efficiency and allowing your organization to leverage enhanced data intelligence for innovation and competitive advantage.

## Custom Data Integration

ITBI's capabilities extend to integrating with systems such as the System Management Facility (SMF), Windows Management Instrumentation (WMI) and secure data management through Linux Secure Shell (SSH). It also integrates data from customer interactions and feedback as well as business and cost mapping processes. ITBI ensures users can aggregate and analyze data from a diverse technological landscape by including third party APIs and common file formats such as Excel, CSV, XML and JSON. This enables users to unlock the full potential of your mainframe data, facilitating more informed decisions and comprehensive insights through seamless integration and advanced analytical capabilities.

# Cost Allocation

The ITBI™ Cost Allocation solution demystifies the perception that the mainframe is a costly “black box” and enhances transparency as well as accountability. Cost Allocation is not just about cost savings but also about gaining a competitive edge by enhancing operational efficiency and decision-making agility.

## Open the Black Box

By integrating sophisticated IT Business Intelligence tools, executives can now access detailed insights into mainframe usage and costs. This visibility answers critical questions such as ‘who is using how much, when, at what cost and why?’ transforming ambiguous cost allocations into precise, actionable data. This fosters a deeper understanding of your mainframe expenses and streamlines cost accountability across business units and IT operations, leading to more reliable financial planning and budgeting.

## Driving Mainframe Value

Maximizing the value of your mainframe investments is crucial for operational sustainability and strategic advantage. Our ITBI solution leverages detailed SMF data feeds and advanced analytics to optimize the use of Million Service Units (MSUs), potentially saving 2-5% in capacity costs. This directly enhances IT operational performance by retiring obsolete legacy tools and adopting modern capacity management solutions.

The approach supports decision-making by providing executives with enhanced local and global reporting capabilities. These improvements drive cost efficiency and equip leaders with the tools needed to make informed decisions swiftly, ensuring that technology investments align with business objectives and market dynamics.

## Strategic Tradeoff Management

The strategic management of trade-offs is pivotal in maintaining a balance between cost, performance, and growth. Our ITBI framework aids executives in navigating these complexities by offering tailored insights into software licensing models like Workload Licensing Charges (WLC) and Tailored Fit Pricing (TFP). These insights allow for an informed selection between different billing models – either focusing on peak usage or overall consumption – based on their impact on the organization’s financial and operational goals. Furthermore, the solution addresses the challenges of storage optimization by implementing strategic clean-ups of storage media, which significantly reduces storage costs without compromising service quality. This optimizes cost and also future-proofs your organization against technological shifts, making it a versatile tool for managing corporate mainframes efficiently.

By providing a comprehensive integration framework, ITBI supports its users in unlocking the full potential of their data, enabling more informed decisions and comprehensive insights through seamless integration and advanced analytical capabilities.

## Key advantages

1. Enhanced Transparency and Accountability
  - ▶ The ITBI Cost Allocation solution provides detailed insights into mainframe usage and costs, transforming ambiguous allocations into precise, actionable data, fostering cost accountability and enabling more reliable financial planning.
2. Maximizing Mainframe Value
  - ▶ Leveraging detailed SMF data and advanced analytics, ITBI optimizes MSUs, potentially saving 2-5% in capacity costs, enhancing operational performance and supporting robust decision-making for technology investments aligned with business objectives.
3. Strategic Tradeoff Management
  - ▶ ITBI supports executives in navigating complexities by offering tailored insights into software licensing models and storage optimization, optimizing cost while future-proofing the organization against technological shifts and ensuring alignment with financial and operational goals.



# Contact



## **Jan Vilstrup** **Global**

Chief Commercial Officer  
Direct: +45 2241 6353  
Email: [jvi@smtdata.com](mailto:jvi@smtdata.com)



## **Nils Nymann Andersen** **Europe**

Regional Sales Manager  
Direct: +45 2222 4615  
Email: [nan@smtdata.com](mailto:nan@smtdata.com)



Kongevejen 400b, 1. sal  
2840 Holte, Denmark

[info@smtdata.com](mailto:info@smtdata.com)  
+45 3962 8887

[www.smtdata.com](http://www.smtdata.com)



CERTIFIED AGAINST  
ISO/IEC 27001:2022  
Information Security  
Management System  
CERT NO. 621197.001