Mainframe Optimization for DB2

Overview of the Performance Enhancement and Cost Reduction Process

Initial Steps…

01

Collect Data

Collect data from Db2 cache and SMF utilizing a simple REXX deployment provided by Critical Path Software.

Analyzes Data

Critical Path Software analyzes the data and provides forecasted CPU consumption savings potential.

02

Defining Savings

03

Proof of Concept (POC) defines the savings in a limited engagement in tandem with a commitment once established.

Provide Consulting

Critical Path Software provides consulting for 2 months (more if required) ensuring maximum savings are achieved.

04

Reduce Cost

05

Reduce costs moving forward. SAVE MONEY!

Results achieved from TTSQL...

1| Initial analysis performed at our cost.

2| Performance optimization reduces cost.

3| Solutions unique to TTSQL for Db2 optimization ["tuning"]

4| Decrease response time for better end user experience.

5| Compress the Db2 CPU batch window more than 70%.

6| Decrease CICS transactional response times.

7| TTSQL Package Clean-Up removes obsolete packages from the Db2 Catalog. Greatly reducing CPU and running applications faster.

# What makes TURBOTUNE® Different?
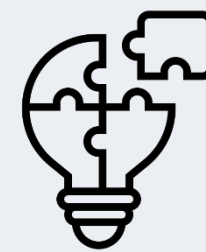
Critical Path Software provides the solutions!

- Other Db2 tools identify performance issues but do not solve them.
- TTSQL creates and implements the solution quickly using AI and automation.

Pay LESS...save MORE!

- TTSQL pays for itself through it's own savings achievement.
- Pay only a percentage of the total savings as you utilize the tool.
- No limitations on use within the specified environment.
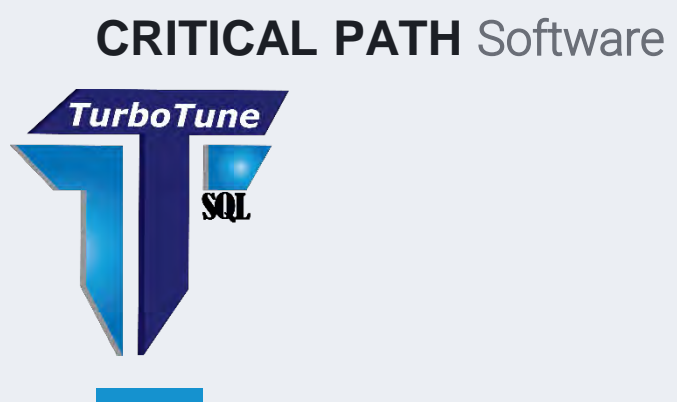
Key features...

Reduces time for complex analysis of indexes and poorly constructed SQL.

Freeing DBA's for other duties. Save 85% of your time on this function.

Index recommendations with artificial intelligence

- Unique to TTSQL
- 100% automatic

Real time monitor with minimal CPU consumption

[<1.5% of system overhead]

- All analyses are completed in Java.

No cost in z/OS

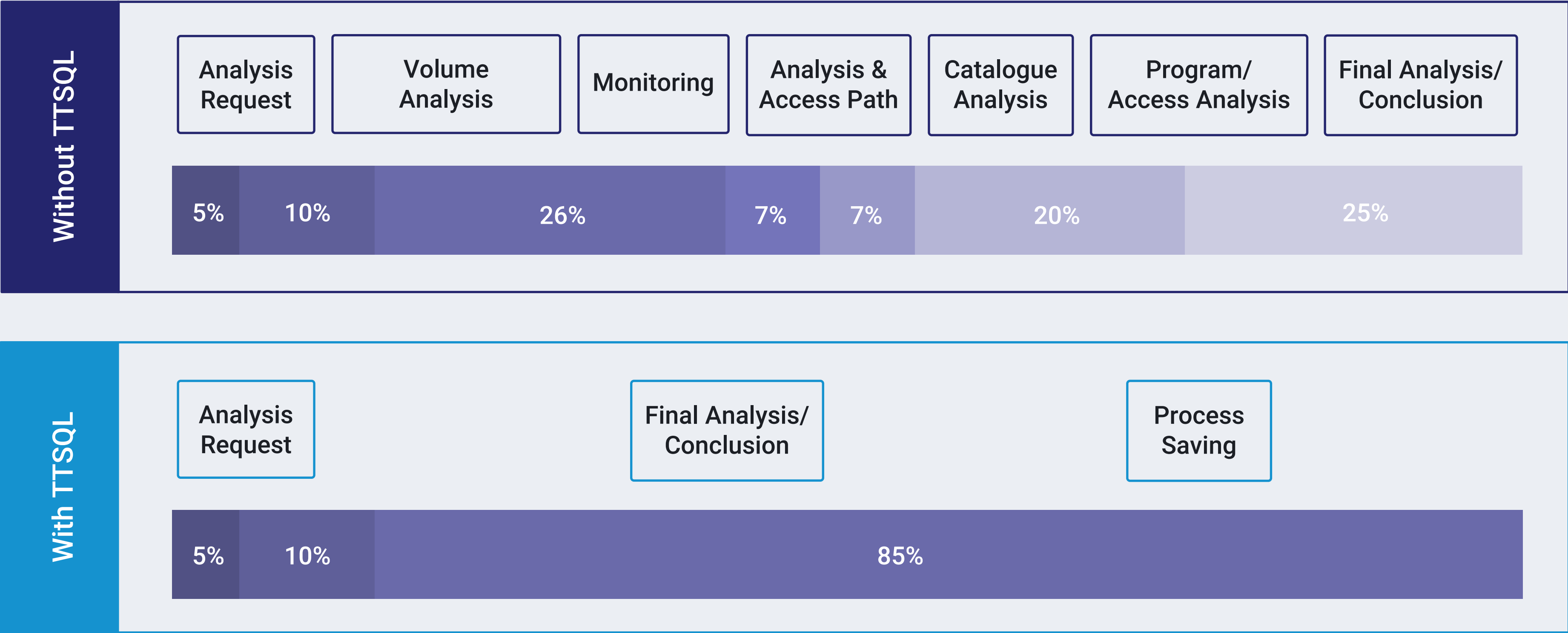- Not intrusive
- NoAPF
- No "hooks"

Key features...

- Analyzes ALL Db2(s), not only one job or program

- Acts as the perfect repository for maintaining history and usage records for capacity planning

- Sandbox can be used to process SMF datasets from production, saving more money

Productivity gains up to 85% from a single SQL

Without TTSQL

| Analysis Request | Volume Analysis | Monitoring | Analysis & Access Path | Catalogue Analysis | Program/ Access Analysis | Final Analysis/ Conclusion |

| 5% | 10% | 26% | 7% | 7% | 20% | 25% |

With TTSQL

| Analysis Request | Final Analysis/ Conclusion | Process Saving |

| 5% | 10% | 85% |

Case Studies...

2 year savings of 25 million

USD [1,248 MIPS – 151 MSU]

5 year savings of 62 million

USD [1,052 MIPS – 123 MSU]

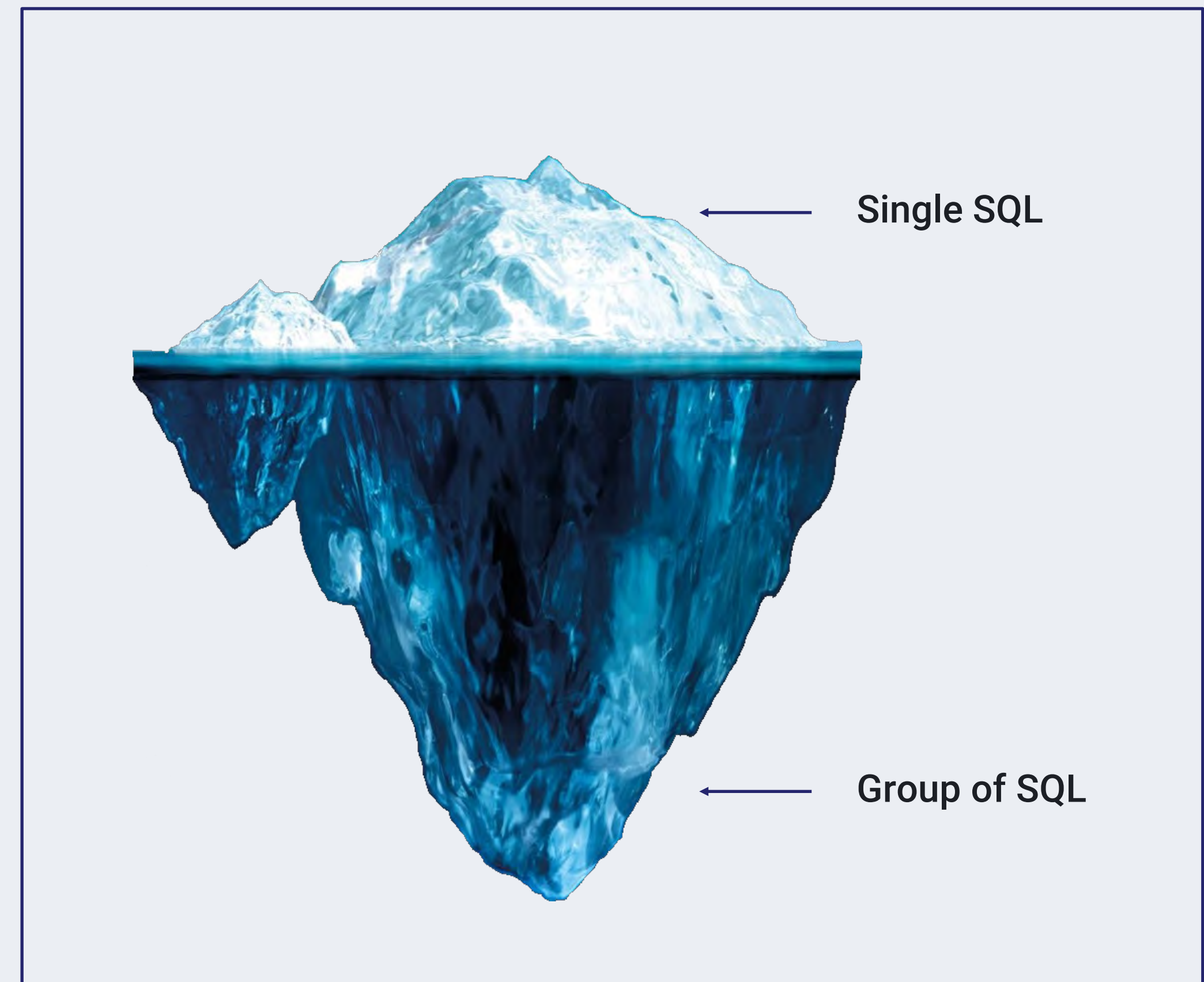**2 year savings of 5 million**

USD [295 MIPS – 34 MSU]

The tip of the iceberg…

- Most of the time, tools identify a single SQL consuming more resources and "killing" Db2. Creating HIGH CPU!

- Using TTSQL inventory abilities, it is possible to view groups of SQL statements that are highly improvable. Reducing CPU!
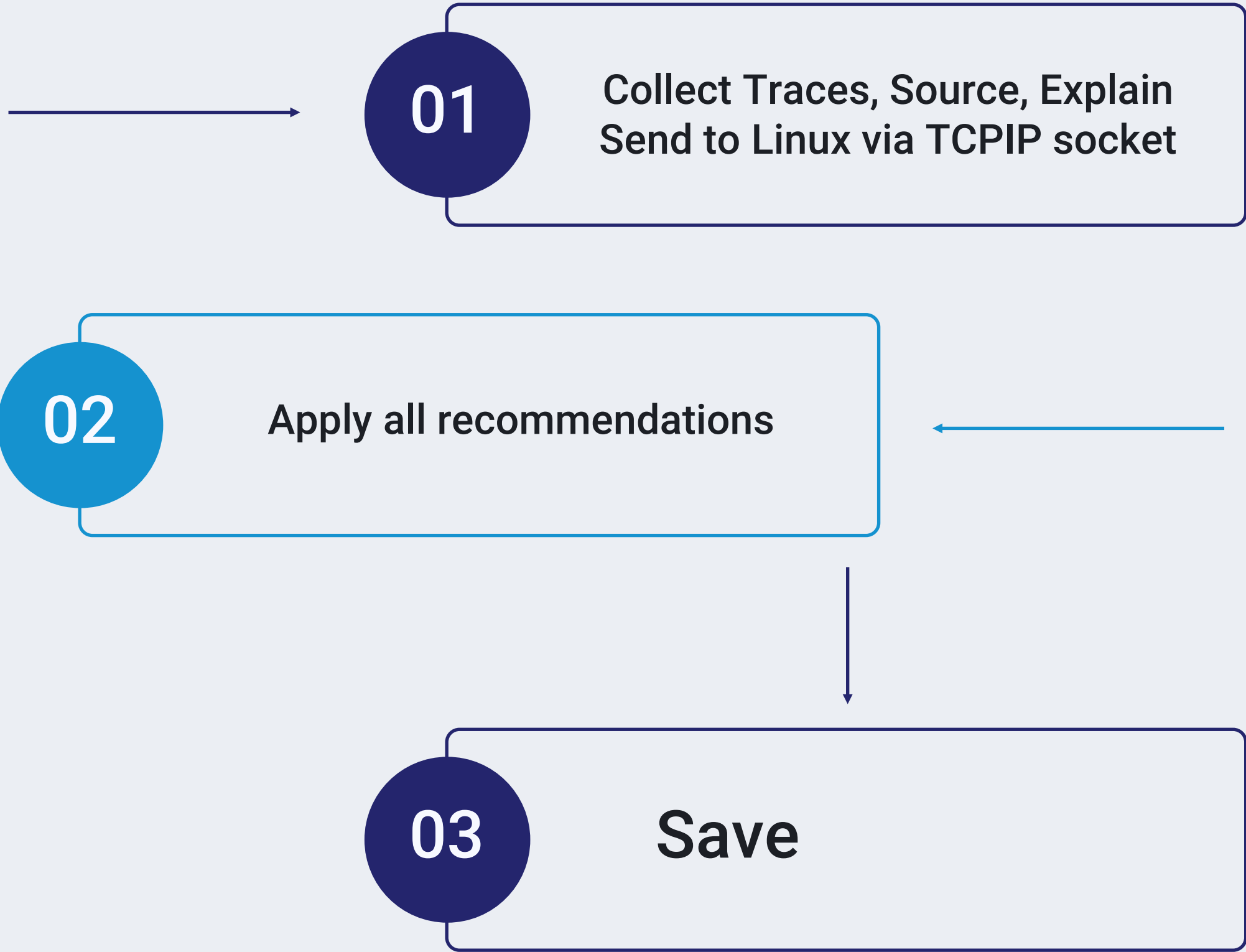
Example:
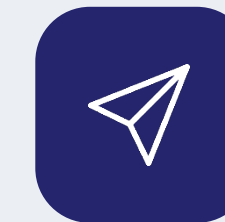1 SQL with CPU a little above normal; executing
 millions of times in CICS!

Single SQL

Group of SQL

Savings as simple as 1...2...3...SAVE!

Db2 z/OS

01 Collect Traces, Source, Explain
Send to Linux via TCPIP socket

02 Apply all recommendations

03 Save
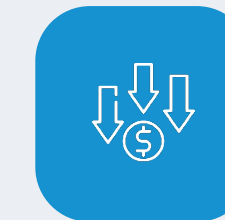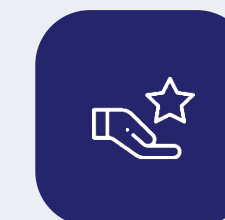
Linux is Free

All information stored in MySQL.

Java GUI analyzes all information

When SMF dump datasets from PROD are shared, the "sandbox" can read and send information directly to Linux.

There is no consumption cost while using the sandbox!

The sand box can be used for Index Recommendations!

Thank You and Contact Us

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