IBM

Introducing New BLU Acceleration from IBM

"We have for the first time an economy based on a key resource [Information] that is not only renewable, but self-generating. Running out of it is not a problem, but **drowning** in it is."

- John Naisbitt, Author and Futurist

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- Analyze more data, faster
- Simplify set up and use
- Support existing systems
- Use existing skills
- Eliminate need for code changes

In other words, make it
super fast and super easy
to access and analyze big data.

Introducing **BLU Acceleration** from IBM:
A new generation of data management innovation capable of delivering speed of thought analytics.

Testing of **BLU Acceleration** shows:*

*Based on internal IBM testing of sample analytic workloads comparing queries accessing row-based tables on DB2 10.1 vs. columnar tables on DB2 10.5. Performance improvement figures are cumulative of all queries in the workload. Individual results will vary depending on individual workloads, configurations and conditions.

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Faster reporting and analytics

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Testing of **BLU Acceleration** shows:*

8-25 times

Faster reporting and analytics

10 times

Storage space savings

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"We were very impressed with the performance and simplicity of BLU. We found that some queries achieved an almost **100x** speed up with literally no tuning!"

- Lennart Henäng, IT Architect, Handelsbanken

How does it work?

BLU Acceleration achieves top performance efficiency with:

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Dynamic In-Memory

In-memory columnar processing with dynamic movement of data from storage

BLU Acceleration achieves top performance efficiency with:

Dynamic In-Memory

Actionable Compression

Patented compression technique that preserves order so data can be evaluated

BLU Acceleration achieves top performance efficiency with:

Dynamic In-Memory

Actionable Compression

Parallel Vector Processing

Multi-core and SIMD parallelism
(Single Instruction Multiple Data)

BLU Acceleration achieves top performance efficiency with:

Dynamic In-Memory

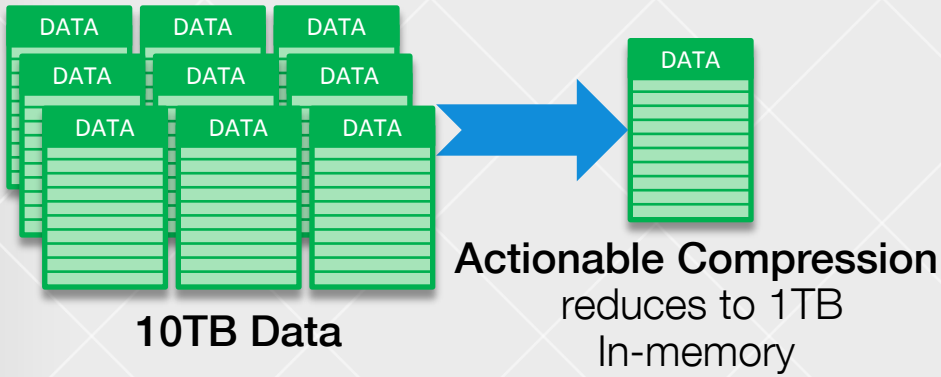
Actionable Compression

Parallel Vector Processing

Data Skipping

Skips processing of irrelevant data

With these innovations,
BLU Acceleration can perform
queries at the speed of thought…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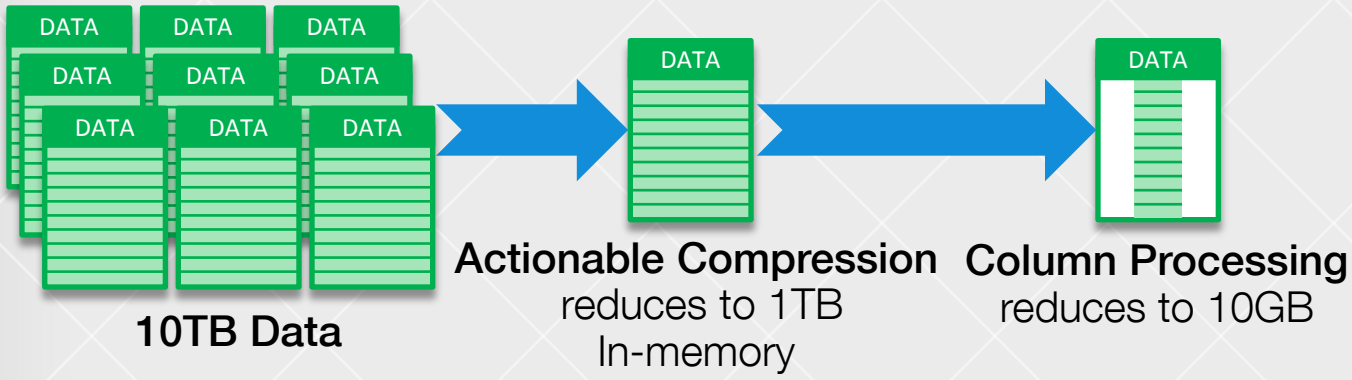
10TB Data
Actionable Compression
reduces to 1TB
In-memory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Column Processing
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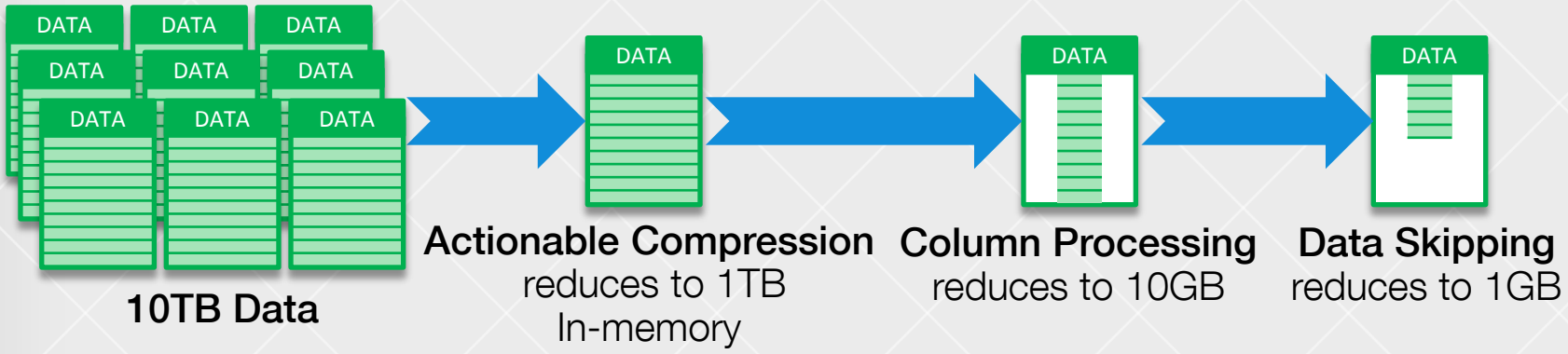
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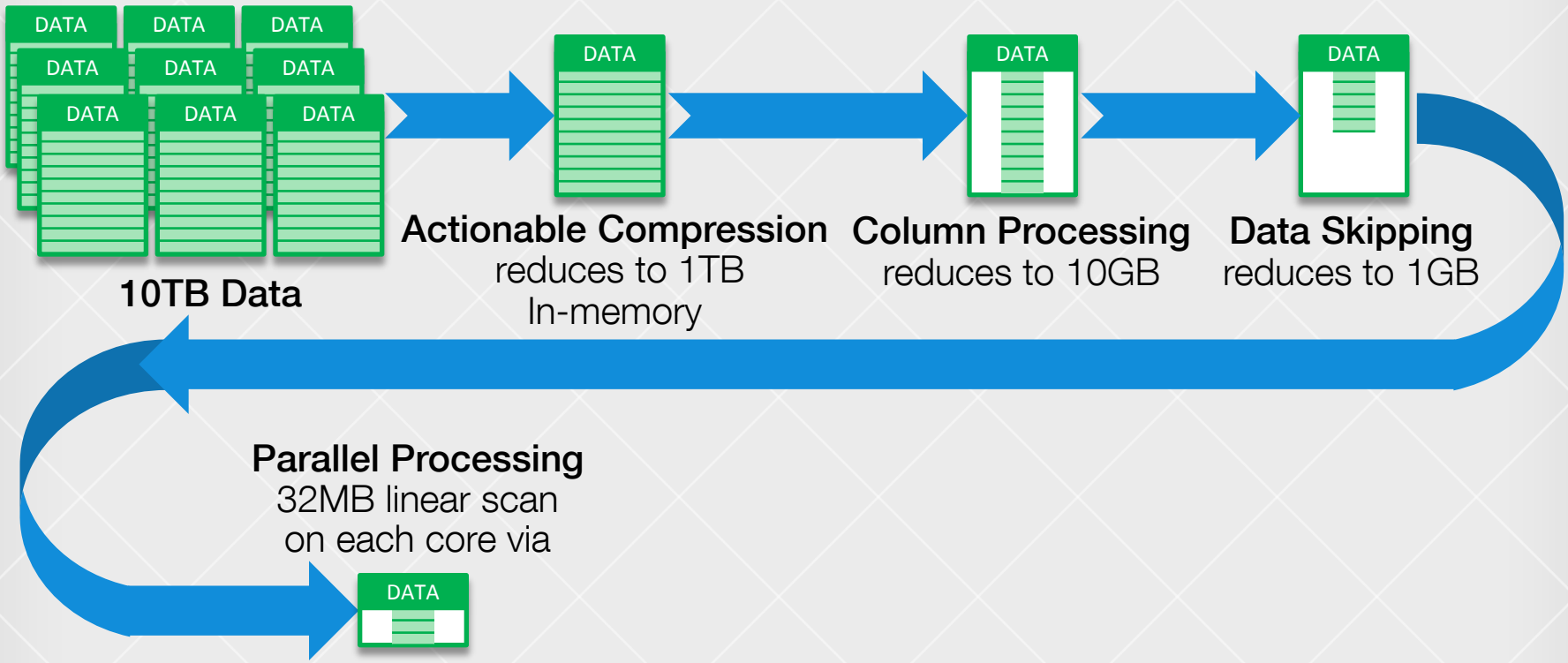
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32MB linear scan
on each core via
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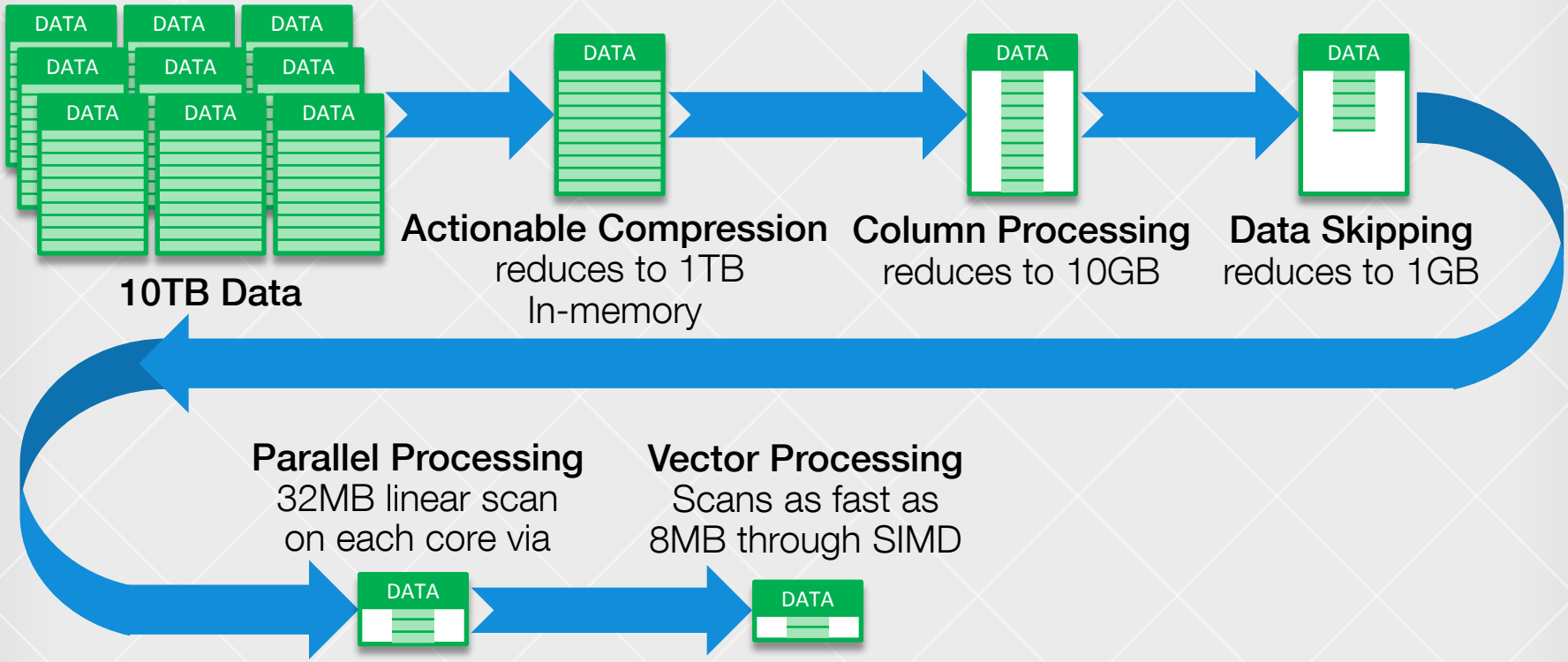
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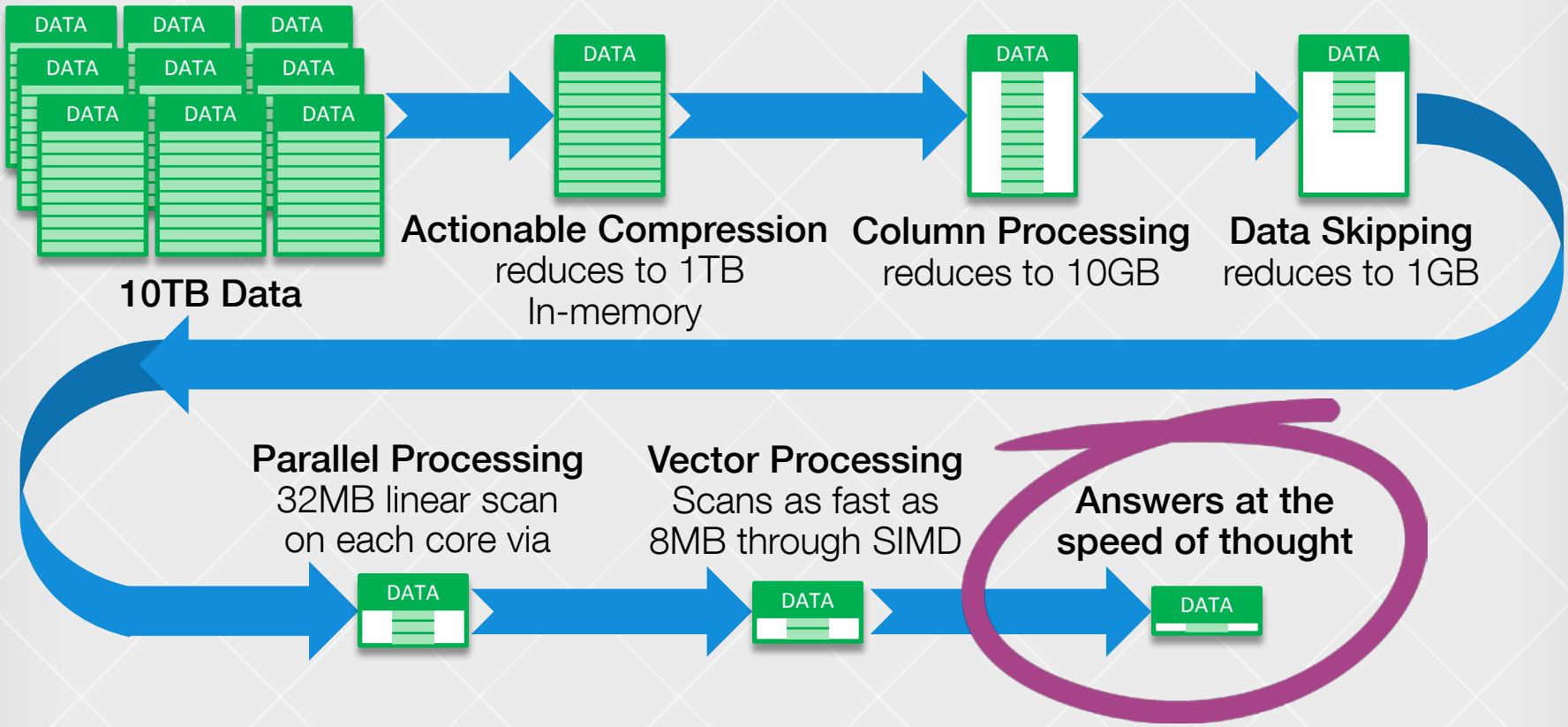
Scans as fast as
8MB through SIMD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Answers at the
speed of thought

Getting started with
BLU Acceleration is also
super fast and super easy…

Database Design and Tuning

1. Decide on partition strategies
2. Select Compression Strategy
3. Create Table
4. Load data
5. Create Auxiliary Performance Structures
   A. Materialized views
   B. Create indexes
      a. B+ indexes
      b. Bitmap indexes
6. Tune memory
7. Tune I/O
8. Add Optimizer hints
9. Statistics collection

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VS

BLU Acceleration

1. Create Table
2. Load data

BLU Acceleration

No Indexes,

No Aggregates,

No Tuning,

No SQL changes,

No schema changes

Faster set-up and faster performance means **faster insights** from more data...

Enabling you to use big data to make better decisions, better serve your customers, improve the efficiency of operations and reduce risk.

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Flexible deployment

Put BLU Acceleration to work:

IBMbigdatahub.com/IBMBLU

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