TDWI INFOGRAPHIC

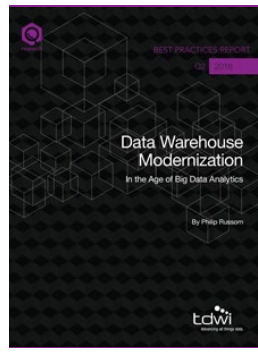## TDWI BEST PRACTICES REPORTS
THE MODERNIZATION OF THE DATA WAREHOUSE

Data Warehouse Modernization

As any data warehouse professional can tell you, the data warehouse (DW) is today evolving, extending, and modernizing to support new technology and business requirements as well as to prove its continued relevance in the age of big data and analytics. This process has become known as *data warehouse modernization*. Synonyms include DW augmentation, automation, and optimization.

Every user organization and its DW is a unique scenario, so every modernization program is, too. Even so, a few common situations, drivers, and outcomes have arisen.

Unless otherwise noted, the facts presented here are from the *TDWI Best Practices Report: Data Warehouse Modernization in the Age of Big Data Analytics*, online at tdwi.org/bpreports. Not all charts sum to 100% due to rounding or multiple answers per survey respondent.
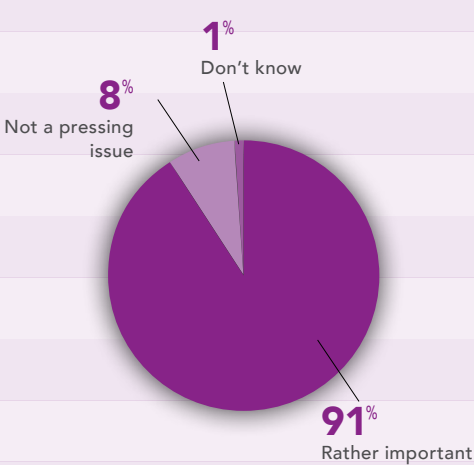
TOP 10 DRIVERS FOR THE MODERNIZATION OF THE DATA WAREHOUSE
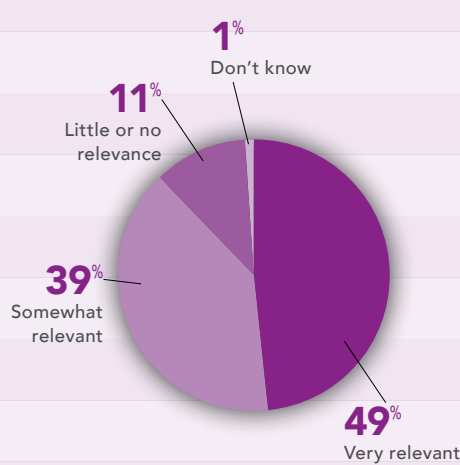*Source: Figure 1, page 7*

Driver	%
Business alignment, so the DW supports business goals	39%
Greater capacity for growing data, users, reports, analyses	37%
Modern practices for analytics (mining, statistics, graph, etc.)	35%
Increasing data volumes	31%
Reporting requirements	31%
Need to run the business on numbers and analytics	29%
Modern practices for self-service data exploration and data prep	27%
Real-time operations, based on fresh data	26%
Problems with existing DW design or architecture	24%
Technical performance of the warehouse	23%

How important is data warehouse modernization?
Source: Figure 2, page 8

- 1% Don't know
- 8% Not a pressing issue
- 91% Rather important

Is your data warehouse still relevant to your business?
Source: Figure 6, page 11

- 1% Don't know
- 11% Little or no relevance
- 39% Somewhat relevant
- 49% Very relevant

What is the state of your DW-to-business alignment?
Source: Figure 13, page 19

- 3% Don't know
- 25% Little or no alignment
- 72% Closely aligned
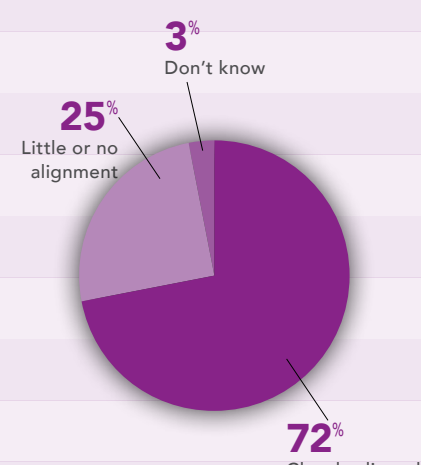
SUCCESSFUL DW MODERNIZATION REQUIRES A STRATEGY
Source: Figure 11, page 18

Strategy	%
Augment (but don't replace) existing DW's primary platform by adding additional data platforms and tools	42%
Strategy determined on a case-by-case basis	24%
Replace existing DW's primary platform	15%
No strategy (although we do need one)	14%
No strategy (because we don't need one)	1%
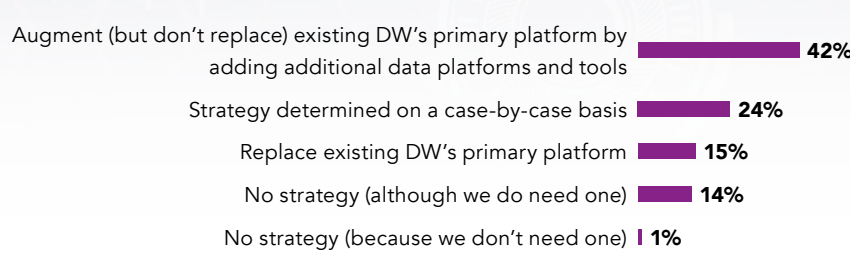
TOP BENEFITS OF DW MODERNIZATION
Source: Figure 8, page 13

Benefit	%
Analytics, visualization, and exploration	53%
Better business decision making	52%
Fast and frequent report/analysis cycles	37%
Operational efficiency of business	34%
Agile delivery of solutions, for nimble business	33%
Address new business requirements	28%
Competitive advantages	28%

TOP BARRIERS TO DW MODERNIZATION
Source: Figure 9, page 15

Barrier	%
Poor stewardship or governance of data	40%
Inadequate staffing for data warehousing	39%
Cost of implementing new technologies	34%
Inadequate skills for new tech and practices	33%
Lack of business case or sponsorship	30%
Lack of experience with big data and analytics	28%
Poor quality of data	27%
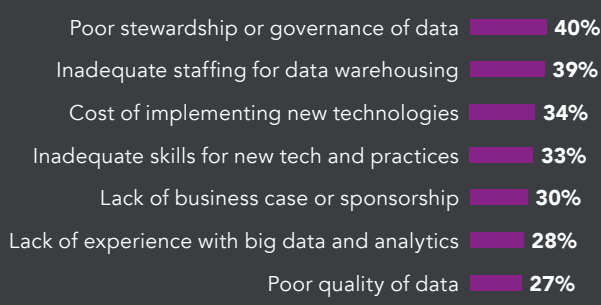
At what pace is your data warehouse evolving?
Source: Figure 4, page 10

- 1% Don't know
- 23% Little to nothing
- 76% Moderate to dramatic
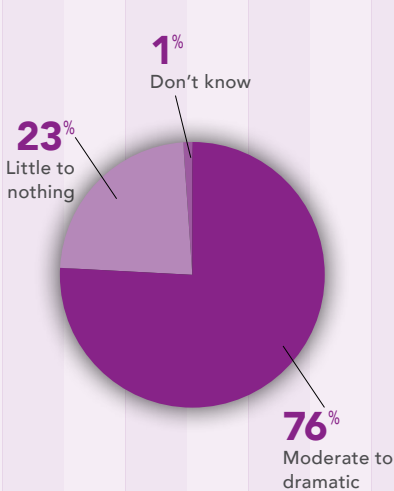
How modern is your data warehouse today?
Source: Figure 5, page 10

- 2% Don't know
- 7% Fully modern
- 50% Behind the times
- 41% Mostly modern
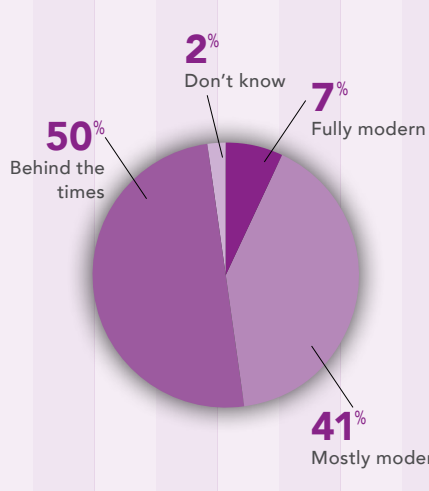
MOST MODERN DATA WAREHOUSES HAVE MULTIPLATFORM AND HYBRID ARCHITECTURES
Source: TDWI Best Practices Report: Evolving Data Warehouse Architectures in the Age of Big Data, online at tdwi.org/bpreports; Figure 10, page 19

The monolith was the norm in the 1990s. It's now rare and declining.

Multiplatform and hybrid architectures are now the norm for modern DWs.

Single monolithic DW with no other data platforms	Central EDW with a few additional data platforms	Central DW with many additional data platforms	Many workload-specific data platforms w/non-central EDW	No true DW, but many workload-specific data platforms instead
15%	37%	16%	15%	15%

Other (2%)