MODERN BI

vs.

LEGACY BI

6

Steps
to Faster
BI Insights
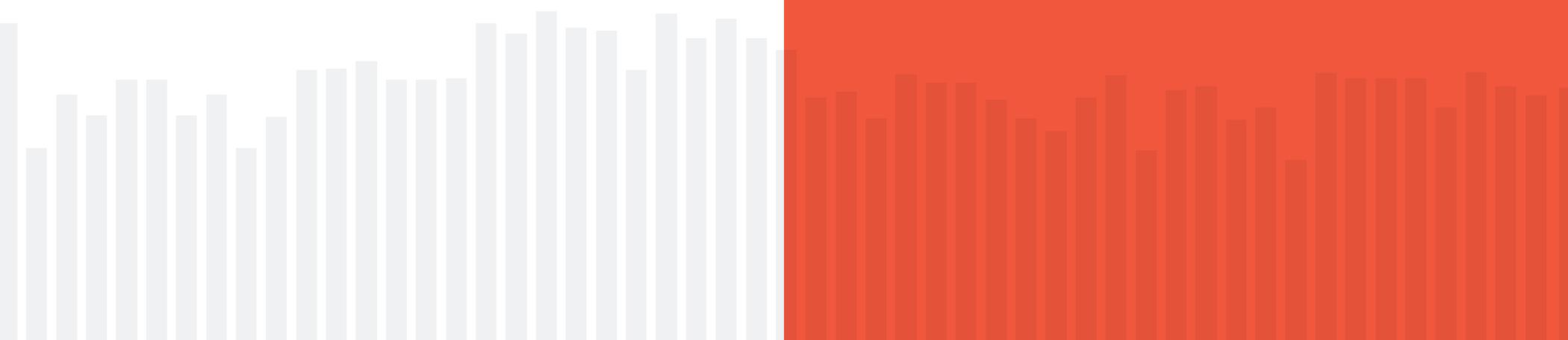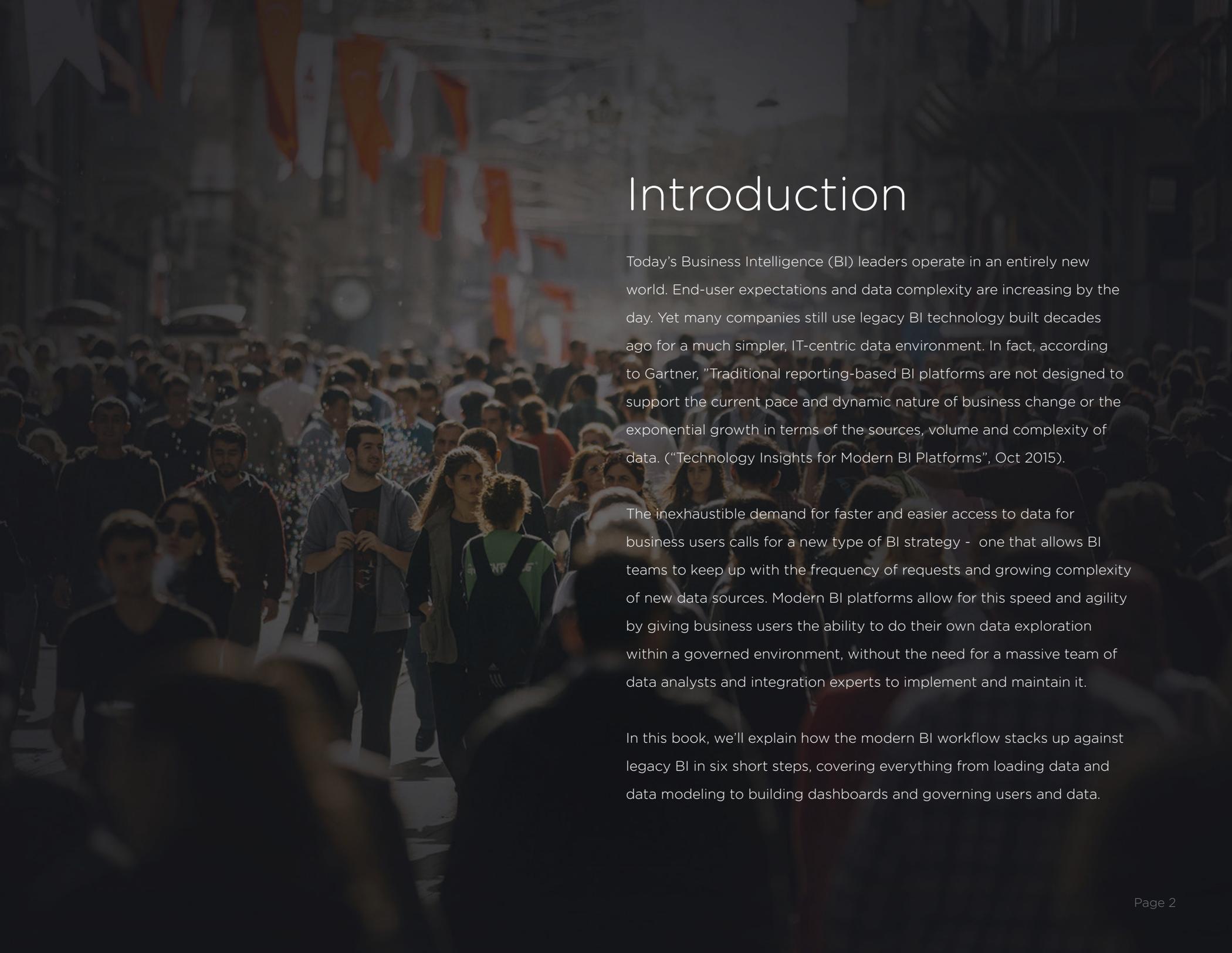
Introduction

Today's Business Intelligence (BI) leaders operate in an entirely new world. End-user expectations and data complexity are increasing by the day. Yet many companies still use legacy BI technology built decades ago for a much simpler, IT-centric data environment. In fact, according to Gartner, "Traditional reporting-based BI platforms are not designed to support the current pace and dynamic nature of business change or the exponential growth in terms of the sources, volume and complexity of data. ("Technology Insights for Modern BI Platforms", Oct 2015).

The inexhaustible demand for faster and easier access to data for business users calls for a new type of BI strategy - one that allows BI teams to keep up with the frequency of requests and growing complexity of new data sources. Modern BI platforms allow for this speed and agility by giving business users the ability to do their own data exploration within a governed environment, without the need for a massive team of data analysts and integration experts to implement and maintain it.

In this book, we'll explain how the modern BI workflow stacks up against legacy BI in six short steps, covering everything from loading data and data modeling to building dashboards and governing users and data.

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5 REFINE + REPEAT

6 MEASURE SUCCESS

FINISH

LEGACY BI

Most companies are using hundreds of applications and generating massive amounts of data each day. This data is ripe for analysis and it's coming from everywhere - data warehouses, the cloud, desktop applications, spreadsheets, and Hadoop. Sourcing and loading all of this data into legacy BI platforms requires weeks of coordinating with business teams and building complicated ETL transformations inside expensive integration software.

MODERN BI

You shouldn't be penalized for having data spread across various sources. With a modern BI platform, you don't have to worry about the size, location, or shape of your data - just load it and keep what you need. Loading data into BI software that understands your schema and can cache terabytes of data per hour is fast and easy. Using guided search to identify which tables and columns satisfy business requirements saves you weeks of time that could be better spent on tasks that bring actual value to end users.

- START
- Identify key metrics and dashboard requirements
- Catalog all data sources
- Create an entity-relationship diagram
- Model new data sources into fact and dimension tables
- Build ETL transformations to bring new data into data warehouse
- Build ETL jobs to bring data into BI environment
- FINISH

- START
- Catalog all data sources
- Load data as is
- Do ad-hoc analysis in ThoughtSpot to identify key metrics
- FINISH

Cloud Sources

SAP · JIRA · salesforce · Marketo · workday

Data Warehouses · ThoughtSpot · Spreadsheets

" BI professionals in companies with complex data environments spend 90% of their time just on ETL.

Source: XPlenty Survey of BI Professionals

1
MONTH

1
WEEK

" We gave our traders instant ad-hoc access to 18 distinct data sources in under two weeks.

– Fortune 500 Financial Institution

LEGACY BI

You've spent weeks transforming your data model to optimize for reporting but most of your tables are still too large for analysis with legacy BI tools. Now it's time to revisit stale business requirements from months ago and summarize data to satisfy a specific set of queries. Unfortunately, creating these aggregate structures takes hours of build time and withholds valuable details from end-users, effectively creating another data bottleneck.

- START
- Understand query types from business
- Create database indexes
- Build cubes, summary tables, and materialized views
- Optimize data loading time into aggregate structures
- FINISH

> " 13% of companies have casual business users that are comfortable navigating OLAP cubes and other dimensional data.
>
> Source: TDWI

MODERN BI

With modern BI, you never have to sacrifice data for performance. Modern BI tools automatically optimize the way your data is organized in-memory to ensure sub-second performance regardless of whether your data has thousands or billions of rows. This means you can say goodbye to the long hours of building cubes and give your users the freedom to explore their data in any dimension. Users are now free to ask any follow-up question they want from their data on-the-fly without waiting days for complex data structures to be built.

- START
- Search across billions of rows
- FINISH

3
WEEKS

<1
SECOND

> " Analyzing billions of rows of data was no problem with ThoughtSpot. It's the fastest BI tool I've ever used.
>
> – Fortune 100 Telecom Provider

LEGACY BI

MODERN BI

After two months, you are finally ready to hand off your data to your business analysts. Although analysts are experts with report-building software, they have a limited understanding of the logical data model and how it relates to key business metrics. As a result, in a legacy BI implementation, BI teams must spend weeks creating a final semantic layer of a data model to give analysts a business-friendly view of their data.

With modern BI platforms like ThoughtSpot, making your data understandable by end users is simple. You can rename columns, create synonyms, and annotate your data quickly - all from one central administrative dashboard. Because modern BI understands your schema at load time, your users can freely explore their data down and across any dimension without the need for manually-built hierarchies or drill paths. You can also enable users to perform more advanced search analytics by defining any kind of formula in minutes.

- START
- Create calculated fields and measures
- Document mappings back to summary tables
- Build hierarchies and drillpaths
- Create a security framework for data access rules
- FINISH

- START
- Create formulas and synonyms
- Annotate fields with descriptions
- Define access groups and rules inside ThoughtSpot
- FINISH

" Data scientists spend 80% of their time just modeling and preparing data for analysis.

Source: TDWI

2 WEEKS

1 DAY

" Our scientists got ad-hoc access to drug trial results in three minutes, instead of waiting three months for reports to be built.

– Fortune 200 Pharma Company

LEGACY BI

Legacy BI vendors charge thousands of dollars for individual user licenses, forcing BI leaders to handpick who will have direct access to data. This creates two classes of BI citizens: business users with specific report requirements and trained analysts who build these reports. Before analysts begin building dashboards, they have to know exactly what they want to build and are stuck dragging fields around and waiting tens of minutes for each query to run.

MODERN BI

Modern BI democratizes data through search. With ThoughtSpot, any user can explore and ask questions of their data and get answers back in milliseconds in the form of a visualization that best fits their search. Then, with a single click, these visualizations can be added to live dashboards that are shareable with any other user in the company without any special licenses or add-on publishing products.

- START
- Determine user licensing strategy
- Discuss report needs with business
- Build reports and dashboards
- Create object access rules
- Publish results for consumption
- FINISH

- START
- All users do their own ad-hoc analysis
- Users share analyses with other groups and users in live dashboards
- FINISH

" 3.8 days is the average time it takes for best-in-class companies to create new dashboards.
Source: Aberdeen

3
DAYS

5
MINUTES

" We have now given over 550 merchants instant access to sales data that they can analyze in seconds at the product SKU level.
– Fortune 100 Retailer

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LEGACY BI

MODERN BI

Unfortunately, as most of us have discovered, few reports are finished after the first go-round. Weeks of meetings and several iterations are required to verify data accuracy and get dashboards just right. On top of that, the creator-consumer divide has effectively created a never-ending queue of report requests for analysts and a massive analytics bottleneck for the business.

Modern, self-service BI tools like ThoughtSpot make it extremely easy for users to get the trustworthy insights they need. When consumers become the creators of analyses, requirements are never lost in translation and new questions are answered as quickly as they are thought of. If you need to change your analysis for the last two months to the last two years, you don't need to send your BI team back to the drawing board - just type 'last 2 years'.

- START
- Revisit business requirements
- Recreate views to satisfy new queries
- Validate data with BI and data warehousing teams
- FINISH

- START
- Drill anywhere and make ad-hoc changes to searches on-the-fly
- Self-service data validation using Search Inspector
- FINISH

" Over 70% of BI initiatives will fail due to data that is out of sync with business requirements.
Source: Gartner

2
WEEKS

1
MINUTE

" ThoughtSpot eliminated the need for daily dashboards and gave our executives ad-hoc access, freeing up hours of analyst time each day.
– Rajeev Gollamudi, Director of BI, Hightail

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LEGACY BI

Now that you're finally in production, you can begin evaluating the success of your BI project - like how many people are adopting the technology and how many reports are being used. This requires collecting data about usage and performance, but most legacy BI vendors charge extra for application management software. You'll have to buy more expensive licenses or resort to building a custom application to quantify the return-on-investment on your project.

○ START

○ Buy application monitoring software or build from scratch

○ Integrate with existing BI environment

○ Build more reports and dashboards to monitor performance and usage

○ FINISH

" BI adoption is fixed at 22% percent, unchanged over the last decade.
Source: Gartner

1
MONTH

MODERN BI

By now you've probably already realized how modern BI makes it easy for non-technical business people to ask and answer their own data questions. This increases the number of users and adoption by orders of magnitude and releases IT from the constant legacy reporting chaos so they can instead focus on governing critical systems and introducing new technologies. Plus, evaluating ROI is easier than ever with an out-of-the-box, centralized view of your entire ThoughtSpot environment.

○ START

○ Monitor performance and usage in one out-of-the-box ThoughtSpot dashboard

○ FINISH

1
MINUTE

" It's been amazing to see our 400+ users performing 10K searches a week on our ThoughtSpot adoption dashboards.
– Fortune 500 Retailer

Conclusion

The future looks bright for BI leaders who embrace modern BI platforms. Gartner predicts that "by 2020, 80% of all enterprise reporting will be based on modern BI and analytics platforms...as these will deliver faster time to insight and value." As the enterprise data landscape becomes more complex, traditional BI solutions and rigid reporting workflows will be unable to provide business people with the immediate access to data they need. Fortunately, modern BI platforms that deploy in weeks, analyze any data source, and promote widespread adoption and ad-hoc data discovery, are forever changing the way business people make decisions.

MODERN BI

3
WEEKS

VS

LEGACY BI

| CONNECT TO DATA | BUILD VIEWS | CREATE MODEL | BUILD REPORTS | REFINE & REPEAT | MEASURE SUCCESS |

4
MONTHS

TIME TO INSIGHTS
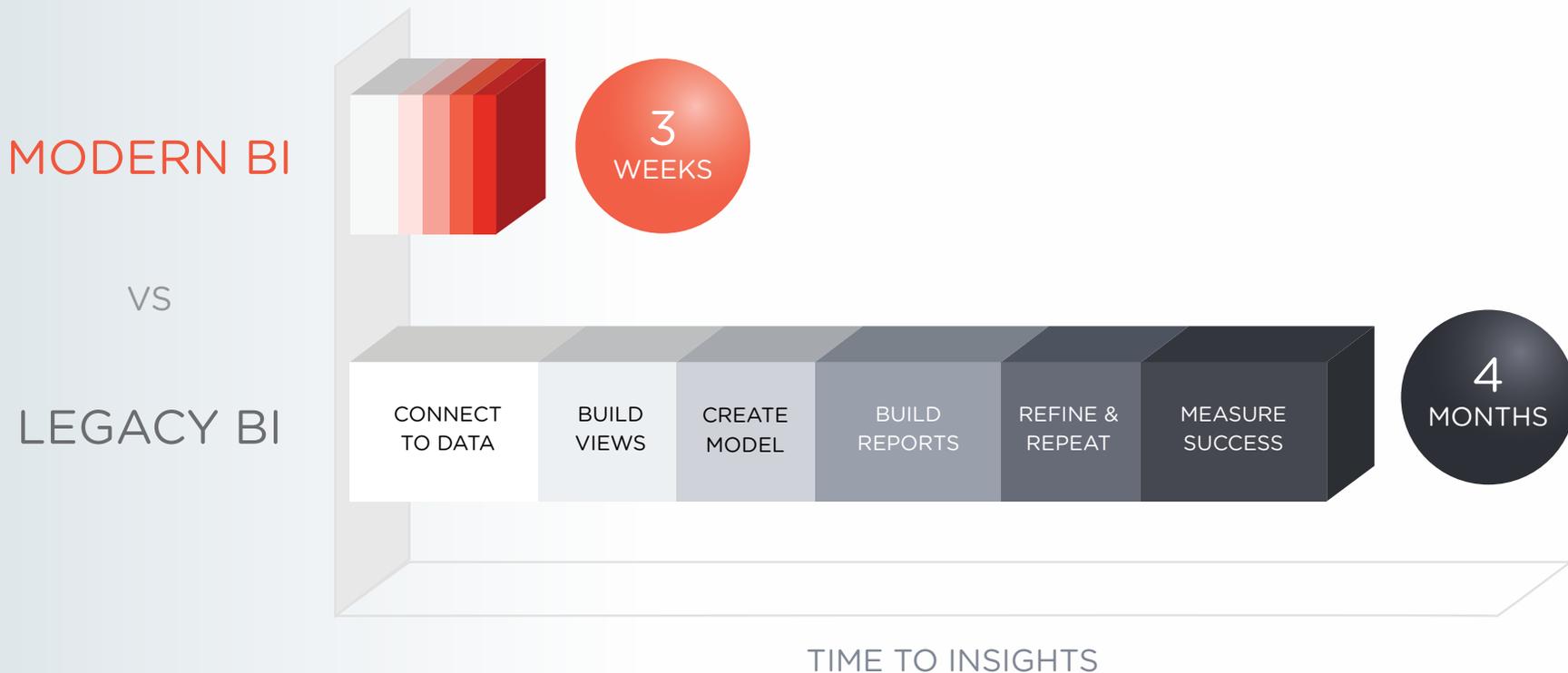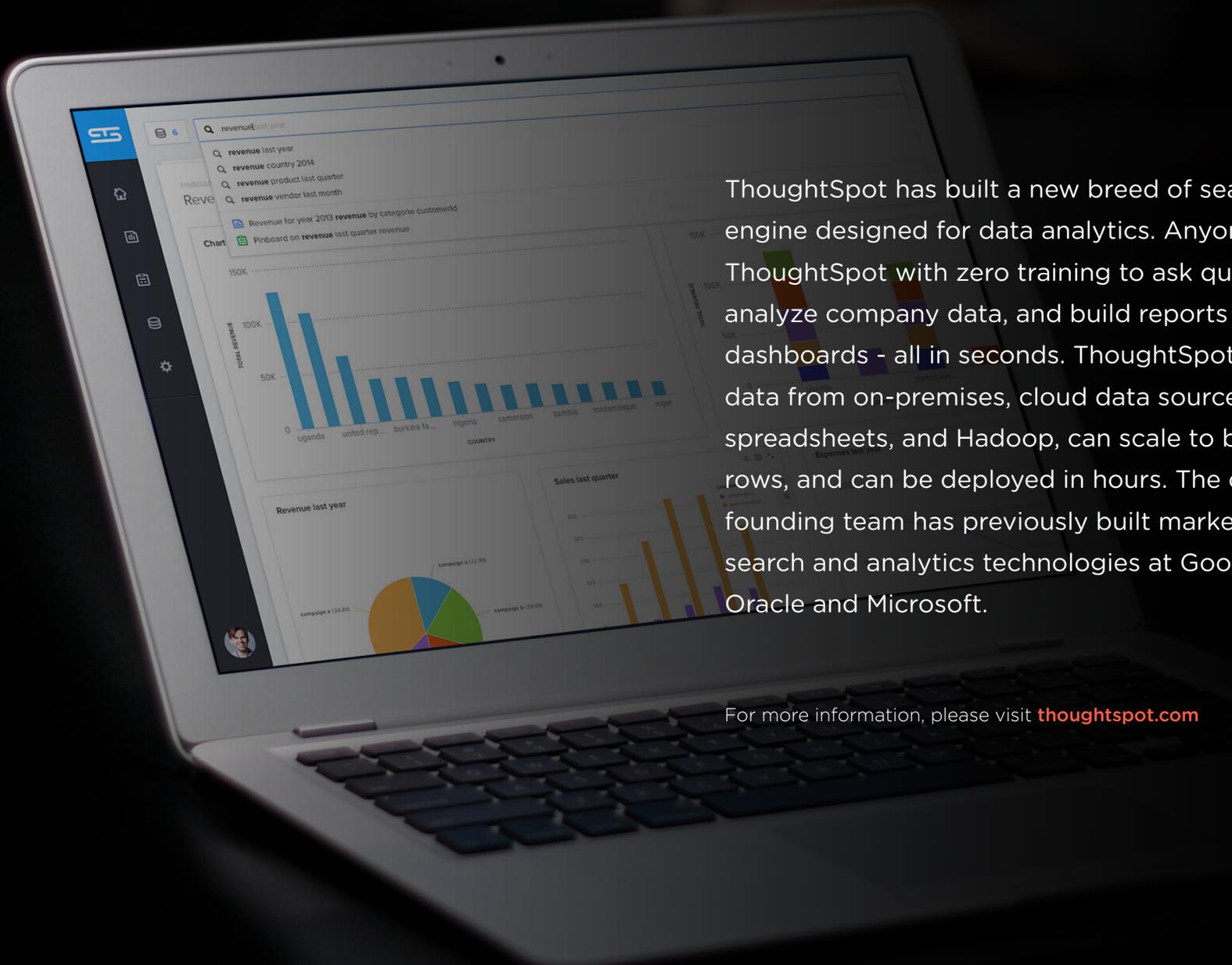
ThoughtSpot has built a new breed of search engine designed for data analytics. Anyone can use ThoughtSpot with zero training to ask questions, analyze company data, and build reports and dashboards - all in seconds. ThoughtSpot combines data from on-premises, cloud data sources, spreadsheets, and Hadoop, can scale to billions of rows, and can be deployed in hours. The company's founding team has previously built market-defining search and analytics technologies at Google, Amazon, Oracle and Microsoft.

For more information, please visit **thoughtspot.com**

DON'T BI. JUST SEARCH.