



Business Intelligence & Digital Literacy

Empowering Users with Data Awareness

Avishay Bason | **Thinkwise**

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<https://www.iaria.org/conferences2025/DATAANALYTICS25.html>





About the Speaker

- Avishay Bason is a Business Intelligence expert and founder of Thinkwise.
- He specializes in transforming data into actionable insights,
- helping organizations improve decision-making and user awareness.

Objectives

- Understand the importance of data literacy

- Learn about BI tools and applications

- Explore success stories and pitfalls

- Take away actionable recommendations

Agenda

1. The Data Challenge
2. What is Modern BI
3. Digital Literacy
4. Case Studies
5. Best Practices
6. The Future of BI
7. Conclusion

The Data Challenge

Organizations generate massive amounts of data daily – from transactions, emails, IoT sensors, and social media.

90% of the world's data was created in the last 2 years, yet only a small fraction is analyzed.

✗ Without literacy: employees ignore dashboards or misinterpret KPIs, leading to costly mistakes.

✓ With literacy: users trust data, ask better questions, and make informed decisions that drive performance.

Key Insight: Data itself isn't the challenge – it's our ability to understand and use it effectively.

Common Problems in Organizations

- Data Silos – information trapped in departments, preventing a holistic view.
 - Lack of trust – conflicting reports cause users to doubt the numbers.
 - Outdated data – by the time reports arrive, decisions are already made.
 - Slow manual reporting – analysts spend hours on tasks that should be automated.
- Key Insight: BI must solve these everyday frustrations to be valuable.

Data Lifecycle

Data travels a journey:

1. Collection – from systems, apps, and sensors.

2. Storage – structured databases or data lakes.

3. Analysis – applying BI tools, models, and queries.

4. Insights – transforming raw numbers into meaning.

5. Action – making smarter business decisions.

Key Insight: The cycle is only complete if insights lead to action.

The Evolution of BI

BI has evolved dramatically over time:

- Manual reports – spreadsheets created once a month.
- Dashboards – real-time visualization of KPIs.
- Self-Service BI – users building their own queries and charts.
- AI-powered BI – predictive insights, natural language queries, and automated recommendations.

Key Insight: BI maturity is about moving from hindsight → insight → foresight.

What is Modern BI

- Modern BI is more than charts:
-  Dashboards – visual storytelling for executives.
-  Self-service analytics – empowering non-technical users.
-  Cloud & AI integration – scalable, accessible anywhere.
-  AI Copilots – conversational tools that answer business questions instantly.
- Key Insight: Modern BI democratizes access to insights for everyone, not just analysts.

Digital Literacy

Digital literacy means the ability to use digital tools, interpret information, and communicate effectively with technology.

In BI, it means understanding where data comes from, how to read charts, and what questions to ask.

Without literacy, even the best tools go unused.

Key Insight: Tools are useless without the skills and confidence to apply them.

Data Literacy

Data literacy is a subset of digital literacy. Essential skills include:

 Reading reports correctly – knowing the difference between a trend and an outlier.

 Interpreting trends – seeing patterns in the noise.

 Asking critical questions – challenging assumptions, validating sources.

Key Insight: Every employee can be data literate, regardless of technical background.

Common Mistakes in Reading Reports

Frequent pitfalls:

- Confusing average with median – misleading results in skewed data.
- Focusing on a single metric – ignoring context and supporting data.
- Misreading correlations – assuming cause and effect where none exists.

Key Insight: Data must always be interpreted carefully and in context.

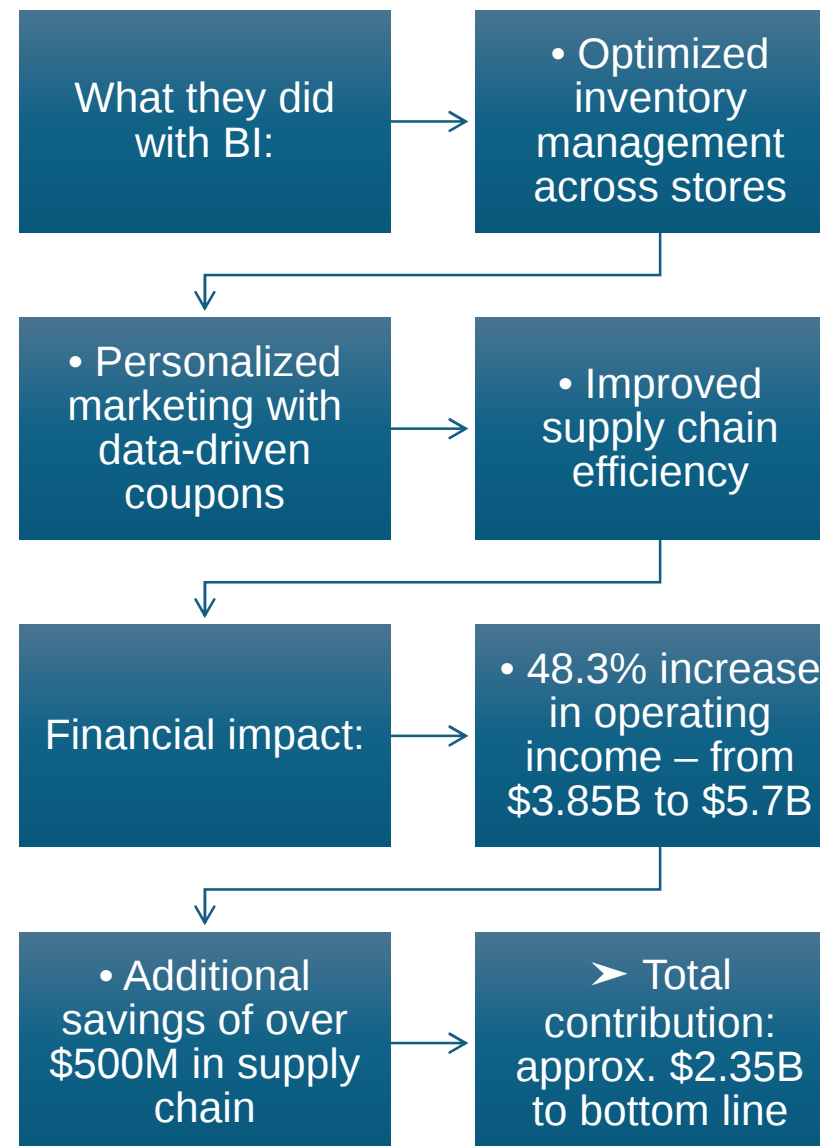
Data Culture

A strong data culture means:

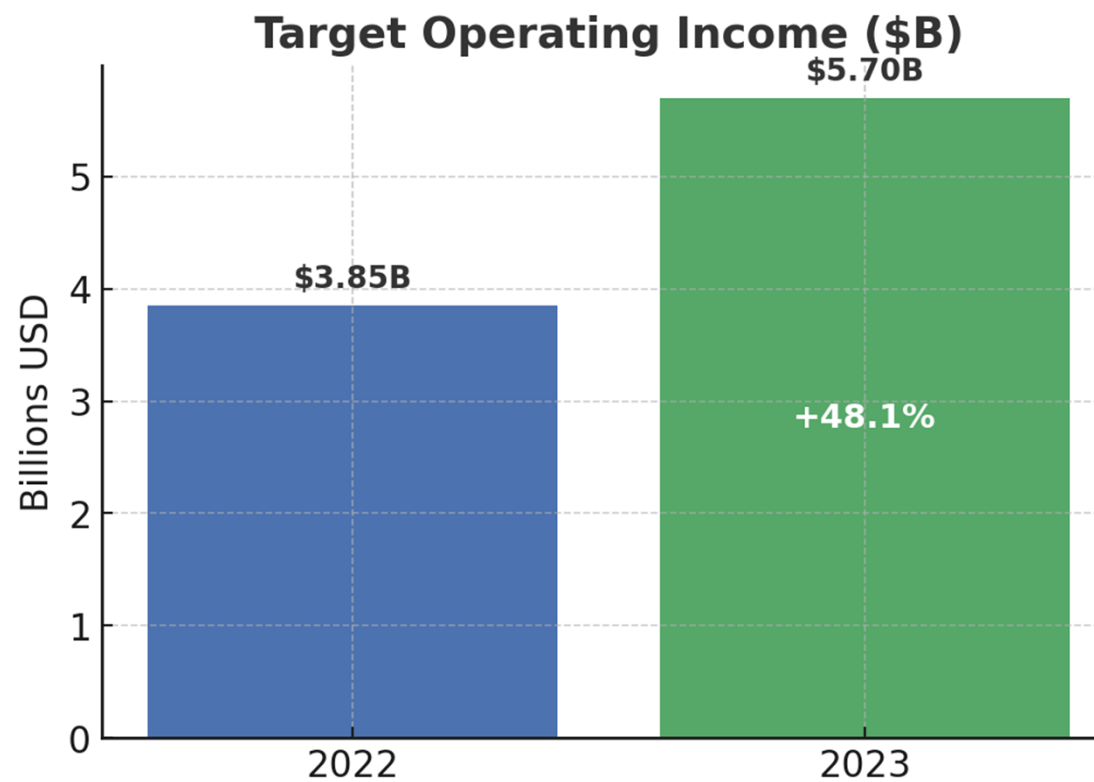
- Data is trusted and used daily in decisions.
- Leaders set an example by using BI in strategy.
- Teams share insights, not just raw numbers.
- Success is measured and celebrated with data.

Key Insight: Data culture transforms BI from a tool into a mindset.

Case Study: Target (USA)



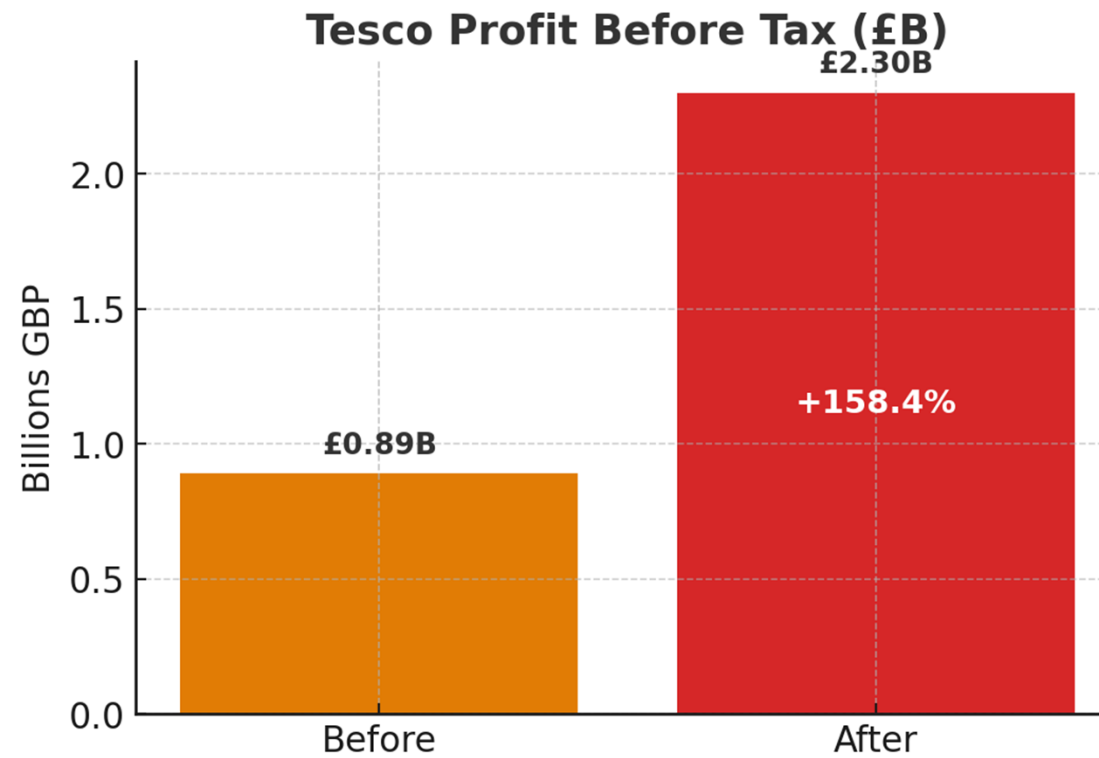
Case Study: Target (USA)



Case Study: Tesco (UK)

- What they did with BI:
 - • Leveraged Clubcard data to analyze customer behavior
 - • Personalized coupons and offers
 - • Identified regional trends for better product placement
- Financial impact:
 - • Profit before tax grew from £0.89B to £2.3B (+159%)
 - • Adjusted operating profit rose to £2.76B (+11%)
 - • H1 2024: profit before tax £1.56B (+10% YoY)
 - ➤ Total contribution: over £1.4B to bottom line

Case Study: Tesco (UK)



Trends for 2025

Key trends:

- Explainable AI – ensuring transparency in algorithms.

- Data Democratization – data available to all employees, not just IT.

- BI for every level – from executives to front-line workers.

Key Insight: The future is inclusive BI – empowering every decision-maker.

Conclusion

✦ Digital literacy unlocks BI's full potential.

✦ Empower people, not just technology.

✦ Users who understand data strengthen their organizations.

Key Insight: BI success is about people as much as platforms.

Classical BI vs BI & AI

Classical BI: Focus on hindsight – reports, dashboards, manual analysis

BI & AI: Predictive insights, natural language queries, automation

Example: From describing the past → to predicting and prescribing actions

Benefits: Faster decisions, better accuracy, higher ROI



Vision: BI 7.0

The next generation of BI integrating
AI, automation, and real-time feedback

Benefits:

-
- Improved ROI
-
- Optimized resource allocation
-
- Enhanced data quality and trust
-

Forecast: BI as an intelligent assistant
embedded in every business decision

ThinkWise Approach & Customer Satisfaction

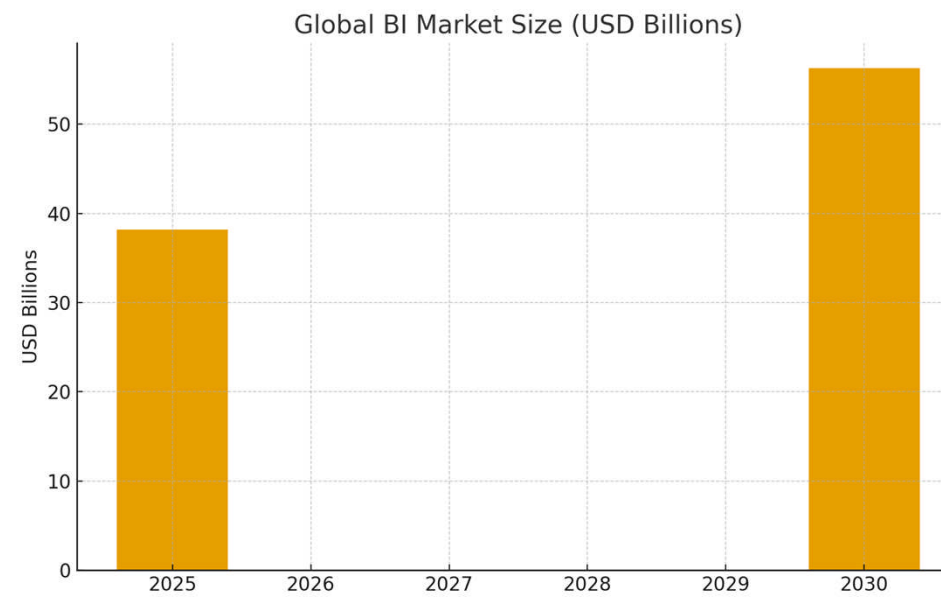
Customer-centric BI solutions
tailored to business needs

Strong focus on training and
digital literacy

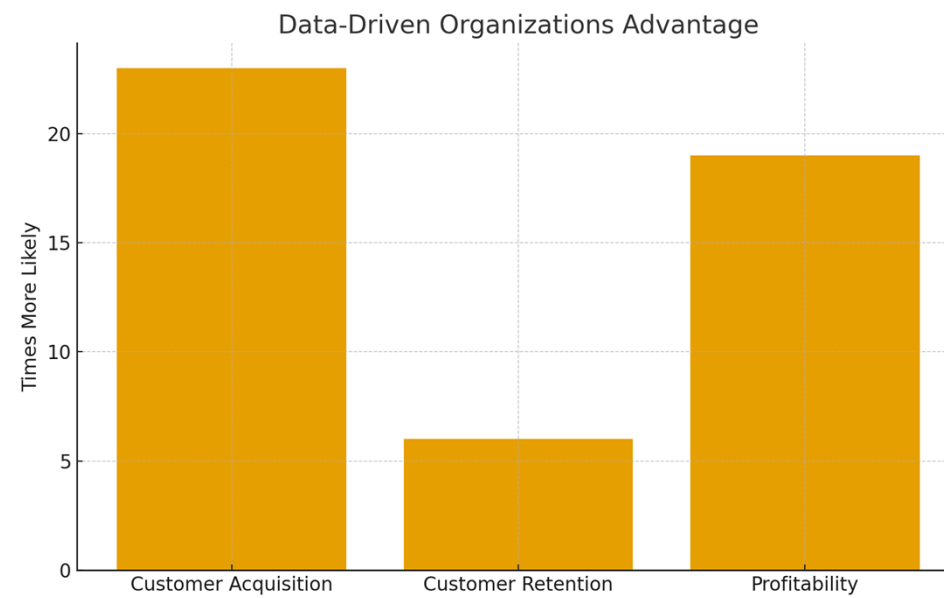
Success stories highlighting
ROI improvements

Publicly accessible insights
showcase ThinkWise innovation

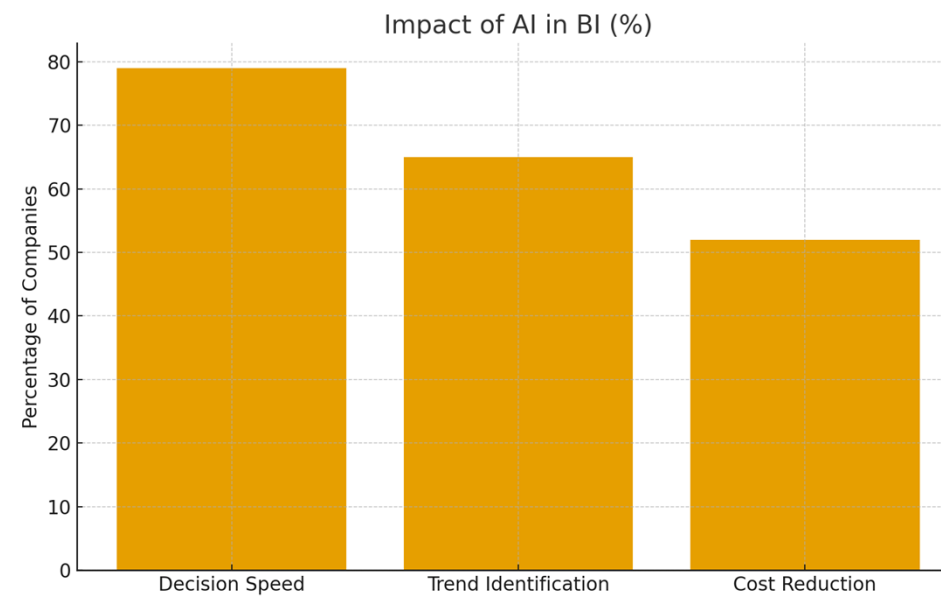
Global BI Market Growth



Data-Driven Organizations Advantage



Impact of AI in BI



Comparison: Classical BI vs BI & AI

Classical BI	BI & AI
Descriptive analytics (past)	Predictive & prescriptive analytics (future)
Manual dashboards & reports	Automated insights, natural language queries
Slow, retrospective decision-making	Real-time, proactive decision-making
Focus on analysts & IT	Empowering all employees with insights

Before vs After AI Adoption

Before AI Adoption	After AI Adoption
Decisions based on historical data only	Decisions guided by predictions & simulations
High operational costs	Operational costs reduced by ~10%+
Limited ability to detect market trends	65% companies improved trend identification
Slower decision cycles	79% companies report faster decisions



Q&A

- We welcome questions and open discussion with the audience.



Thank You!

- Avishay Bason | Thinkwise