

## Tenflix Movie Streaming Platform

**Background:** Tenflix is an innovative movie streaming platform, based in California, that has grown from a small DVD rental store into a global digital enterprise. Over the years, it has leveraged the rise of the internet to deliver movies, TV shows, etc., to millions of subscribers worldwide. With its extensive catalogue, Tenflix now handles massive volumes of user interactions every minute.

**Problem:** As the platform grew, Tenflix faced the challenge of managing millions of pieces of constantly streaming data. Storing a vast amount of data was not enough - the company needed actionable insights to remain competitive.

**Goal:** The main goal was to transform raw data into meaningful insights or information that could serve as a guide for strategic decision-making. Tenflix aimed to improve customer service through personalisation, to accurately predict content demand, and, of course, operational efficiency optimisation. In addition, the company looked to maintain flexibility in a highly dynamic market, where users' loyalty depends on timely and accurate decision-making.

**Solution with the help of BI:** To achieve this goal, Tenflix adapted Business Intelligence<sup>1</sup> methods rather than relying solely on Big Data. Overall, Big Data is very good for collecting, storing, and managing large volumes of information, especially at high speeds, but on its own, it doesn't explain trends or other decision-making. BI, on the other hand, provides structured analysis, as well as data visualisation and KPI monitoring, enabling raw data to be transformed into meaningful information. The clarity of BI was essential to avoid paralysis caused by a large amount of unorganised data. To understand the meaningfulness of BI technologies more, let's have a look at the top 5 BI product comparison table.

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<sup>1</sup> <https://www.microsoft.com/en-us/power-platform/products/power-bi/topics/business-intelligence/what-is-business-intelligence>

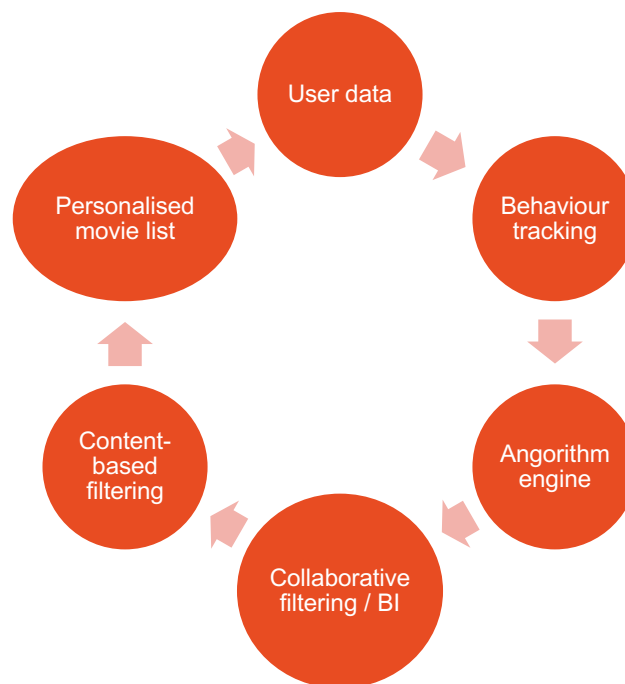
## BI Product Comparison for Tenflix

BI tool	Pros	Cons	Why it fits Tenflix	Suitability
<b>Microsoft Power BI</b>	Cloud-native, live dashboards, easy integration with Azure & diverse data sources, user-friendly interface, cost-effective.	Requires Microsoft ecosystem for best performance, may require Azure integration.	Ideal for Tenflix's global operations. Scalable, accessible to non-tech teams, and excellent for visualising KPI as churn, ARPU, and content performance.	Very high
<b>Tableau</b>	Industry-leading data visualization, strong storytelling features, wide data source support.	Higher licensing costs, steeper learning level for beginners.	Very good for Tenflix's executive and analyst teams who need advanced visual insights on viewing behaviors and market trends.	High
<b>Oracle BI</b>	Handles very large datasets, strong predictive modelling, enterprise-grade security.	Expensive, resource-intensive, requires skilled IT teams.	Suitable for Tenflix's scale, ensuing robust performance for billions of records and global user data.	High
<b>Sisence</b>	High-speed analytics, user-friendly for non-tech teams, supports real-time data analysis.	Less comprehensive than Oracle or Microsoft for global scale.	Valuable for Tenflix managers who need fast insight into content popularity, server demand, and regional patterns without big tech expertise.	High
<b>TIBCO Spotfire</b>	Excellent for predictive analytics, alerts, and collaborative dashboards.	Requires advanced analysts to unlock full potential.	Can help Tenflix anticipate churn, optimize recommendations, and apply BI for proactive customer engagement strategies.	High

1. Among the available solutions, Microsoft Power BI stands out as the most suitable tool due to its scalability, intuitive dashboards, and seamless integration with various data sources in the cloud. Power BI allows Tenflix to present analytical information in a form that is accessible to non-tech teams, making the decision-making process easier within the company. In addition, its predictive analytics features help identify viewing trends, predict customer churn, and optimise licensing strategies. Unlike Big Data systems, which can overwhelm managers with unfiltered data streams, BI provides and prioritises the most relevant information. In this way, Tenflix has turned massive data flows into a competitive advantage and strategies.

**Conclusions:** Tenflix's decision to use BI instead of relying exclusively on Big Data has enabled it to transform information into useful knowledge rather than leaving it as an unmanaged asset (data). By using tool such as Microsoft Power BI, the company can drive growth, enhance customer engagement, and maintain strategic flexibility in the competitive streaming market.

2. Tenflix session displays a different list of movies because the platform uses BI combined with recommendation algorithms to personalise users' experience (Figure 1).



*Figure 1: Work of the recommendations algorithms*

The systems analyse users' past behavior like shows, time, device, time of the day etc. Then, BI tools compare this information with data from millions of other users to identify patterns and similarities, often using ML models such as collaborative filtering and content-based filtering. Therefore, the company can also apply live analytics and A/B testing to instantly adapt recommendations, ensuring a wise and personalised catalogue. In terms of BI, Tenflix also measures the success of these recommendations by using KPIs like engagement rate, churn reduction, and average revenue per user. OPAP cubes and dashboards allow managers to track these KPI metrics in real time, ensuring that personalisation delivers measurable business value.

In the list are provided the most popular reasons why Tenflix recommend specific movie for the user:

- Viewing history
- Watch time
- Device and context
- Time of the day / Season
- User demographics
- Collaborative filtering
- Content-based filtering

- A/B testing
- Live analytics
- BI KPIs

All these metrics and tools produce a unique and personalised movie list for each subscriber.

3. The surprise option on Tenflix is not truly random - it's based on business analytics tools combined with recommendation algorithms (Figure 1), which the Author has mentioned above. The platform analyses users' viewing history, the behaviour patterns, filters, live analytics, and trends. What might be a surprise for a user, in reality, is a carefully calculated suggestion by the company designed to maximise engagement and to reduce decision fatigue.

4. BI analytics improve the old manual reporting system by making the process faster, continuous, and predictable, rather than static and retrospective. To understand the difference more clearly, let's look at the comparison table below:

### Manual reporting vs Business Intelligence

Aspect	Manual DVD Store Reporting	BI tools
Frequency	Monthly summaries	Live dashboards and frequent updates
Volume of data	Hundreds of rentals	Millions of transactions across global catalogues
Data sources	Store receipts or observation	Internal /External: CRP ERP, social media, device logs etc.
Type of analysis	Descriptive	Descriptive, diagnostic, predictive
Accuracy	Dependent on manual counting	Automated, standardized, ETL/ELT processes ensure consistency and quality
Insights	Basic promotions and stock forecasting	Personalised recommendations, churn detection, ROI optimisation
Visualisation	Simple tables or lists	Interactive dashboards, OLAP cubes, advanced charts
Decision impact	Local store-level decisions	Strategic, global, department-specific decision making

**Conclusions:** Unlike manual reports, which only described what had happened, BI supports predictive analytics, allowing Tenflix to forecast demand, identify customer churn risks, and plan licensing decisions. In addition, BI visualisations (dashboards, OLAP cubes) make complex analytical data immediately understandable to managers across all departments. In short, BI transforms descriptive, limited reports into scalable, dynamic, decision-ready analytics that keep pace with Tenflix's global scale. Overall, BI elevates Tenflix from simple reporting to a data-driven strategy, providing speed, scale, and intelligence that manual methods could never achieve.

5. Business Intelligence empowers the business to move from descriptive reporting to predictive and prescriptive decision making. With insights validated by Gartner's Magic Quadrant and supported by advanced platforms like Microsoft Power BI, Oracle, and IBM Cognos - Business Intelligence becomes a strategic engine for growth rather than a passive reporting tool.

Let's have a look at the real-life data statistics demonstrating BI advantages for the business:

- McKinsey, cited by Wired and Renaissance<sup>2</sup>, shows that over 80% of Netflix viewing comes from recommendations powered by algorithms.
- Forrester Research<sup>3</sup> (2020) found that businesses using predictive analytics achieve 73% higher customer retention rates, confirming BI's value for loyalty strategies.
- "80% of companies surveyed have seen their revenues increase after implementing real-time analytics." (Cebr<sup>4</sup>)
- Worldwide IT spending is expected to total \$5.43 trillion in 2025, an increase of 7.9% from 2024, according to the latest forecast by Gartner<sup>5</sup>, Inc.
- "The demand for business intelligence (BI) and analytics technology is growing fast as more businesses are relying on data for decision-making, and the software market is expected to reach a value of \$13 billion by 2025." (Gartner<sup>6</sup>, 2025).

**Conclusions:** BI gives the company a decisive edge by turning massive data flows into actionable insights, with statistics that showing BI boosting retention, cuts costs, and delivers faster decisions. By leveraging advanced platforms recognised in Gartner's Magic Quadrant, the company can personalise viewing, optimise content investments, and ensure sustainable global growth. All of this leads to higher customer loyalty, stronger profitability, and a lasting competitive advantage.

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<sup>2</sup> <https://www.renaissance.io/journal/how-netflix-uses-data-to-drive-hyper-personalized-customer-experience-cx>

<sup>3</sup> <https://www.forrester.com/blogs/category/predictive-analytics>

<sup>4</sup> <https://cebr.com/blogs/yahoo-finance-real-time-real-value-80-of-businesses-see-revenue-increases-thanks-to-real-time-data/>

<sup>5</sup> <https://www.gartner.com/en/newsroom/press-releases/2025-07-15-gartner-forecasts-worldwide-it-spending-to-grow-7-point-9-percent-in-2025>

<sup>6</sup> <https://www.gartner.com/en/digital-markets/insights/software-market-insights-business-intelligence-and-data-analytics>

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