



# Debunking 'Power BI Is Free'

What IT and analytics leaders need to know about the true costs of Power BI.



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# Introduction

In the rapidly evolving landscape of data analytics and business intelligence, choosing the right platform is crucial for IT leaders and analytics buyers. Often, the allure of a “free” solution can be tempting, leading organizations to gravitate toward Power BI, enticed by its initial zero-cost promise and seamless integration with the Microsoft ecosystem. However, beneath the surface of a freemium model lies a complex web of costs and intricacies that can significantly impact an organization’s budget and operations.

Power BI has long been positioned as a strategic tool to drive Azure consumption, leveraging its vast array of features and integration capabilities to establish itself as a leader in the analytics market. We delve into the intricacies of licensing, the effects of the recent integration with Microsoft Fabric, and the complexities within the product itself. Our goal is to provide IT and analytics purchasers with the insights needed to make decisions that are both strategically sound and financially viable.

Traditionally, Microsoft Power BI has typically been available and distributed through Office 365 bundles. But in early 2024, Microsoft announced Power BI would be integrated and bundled as part of a new cloud platform called Microsoft Fabric. Microsoft Fabric bundles Power BI, Azure Data Factory, and Azure Synapse on top of a new SaaS architecture in an attempt to unify legacy technologies and, ultimately, compete more effectively for the cloud lakehouse market. To get Power BI customers to adopt Fabric quickly, Microsoft announced that all Power BI Premium customers must agree to re-platform to Microsoft Fabric by January 2025. The bundle of Power BI into Microsoft Fabric introduces complexity that will have wide implications on product and pricing.

**This guide debunks the mindset that Power BI is free—and shares four key areas IT leaders and analytics buyers should know when it comes to the total cost of Power BI.**

# 1 Microsoft Licensing

Organizations typically start using Power BI due to it being bundled with Office 365. Freemium software may seem like a cost-effective way to get started, but customers often outgrow their freemium licenses as they start to encounter limitations.

## Licensing options include:

### Power BI 'FREE'

As a free desktop download (PC only) or included as part of the Office 365 bundle, this free download often serves as an organization's initial exposure to Power BI. Yet with this version, there is no ability to share content and it immediately spawns individual data silos that begin to proliferate across the organization. This quickly leads to the desire to upgrade.

### Power BI Pro

In most cases, this is where customers then decide to upgrade to Power BI Pro for \$9.99 per-user per-month, or sometimes it's even inherited as customers upgrade from Office 365 E3 to E5. This solves for the inability to share content, but customers soon outgrow this solution too as they begin to encounter the inherit product limitations and lack of enterprise-grade features. Some of these limitations include a limit of 1GB per data set, data refresh restrictions, only 10GB of data per user, and a lack of many important governance capabilities, AI features, and more.

### Power BI Premium Per User (PPU) P-SKU

Once customers incur the roadblocks of Power BI Pro, they then see that for just \$10 more, they have an option to upgrade to Power BI Premium Per-User. At first, customers feel confident as it removes those initial limitations and provides several requisite Enterprise features. Unfortunately, they come to realize that PPU users can't share with others who just have Power BI Pro licenses or any non-licensed users, and they still don't get all of the latest innovations (AI features, etc).

This exhausts the per-user license options and customers begin to realize that they need to jump to the next tier to fulfill enterprise-ready use cases. Historically, this is where customers made the jump to purchase Power BI's capacity-based licensing offering—Power BI Premium.

However, Microsoft has recently announced that they are shifting their enterprise platform licensing. **Power BI Premium (PPU) is being retired** at the end of 2024, and customers must now migrate to Microsoft's latest bundle, Microsoft Fabric, by January 2025 in order to maintain necessary functionality.

## 2 The Implications of Microsoft Fabric

So, what is Microsoft Fabric? Fabric is a new product bundle from Microsoft. Microsoft has realized that while Power BI Premium has historically been a successful way to monetize Azure, they are missing out on the larger cloud platform market opportunity. Up until this point, Azure customers have been increasingly relying upon third-party solutions like Azure Databricks, Snowflake, and other cloud lakehouse vendors for their cloud warehousing and lakehousing requirements.

In an attempt to better capture this market, they are hoping to leverage Power BI's large existing install base by re-platforming and bundling Power BI alongside Azure Synapse, Azure Data Factory, and several other legacy components to form a single "end-to-end" offering. While an "all-in-one" data platform may sound appealing, this further adds to the unpredictable nature of Power BI spend, further embeds Power BI customers into the Microsoft "stack," and ultimately introduces a whole new level of complexity for customers. This includes:

### Unpredictable analytics spend

The existing Power BI Premium licensing was already considered unpredictable when customers attempted to budget for analytics. Estimating licensing costs with Power BI Premium was more of an art than a science; spend was determined by a variety of factors including the number of users, user concurrency, data model size, and more. What often started with customers budgeting ~5k per month for the initial P1 node in Power BI Premium, often escalated quickly when production-level usage began.

This often materialized with customers having to unexpectedly add more cores as they scaled the environment, leading to unforeseen spend. This challenge is now only exacerbated with Microsoft Fabric since Power BI is being bundled alongside additional platform services with no easy way to isolate analytics spend from the rest of the compute generated by the adjacent Fabric workloads.

### Reliance on use of other Fabric workloads

Organizations that use Power BI today typically already have existing data pipeline tools in place. This could be a data warehouse or lake house, an ETL tool for integrating data, and/or a data science platform. Since it has been announced that existing Power BI Premium customers must now migrate to Microsoft Fabric, it is implied that existing Power BI Premium customers can continue to use Power BI "as-is" within Microsoft Fabric without having to pay extra to use the other services in the bundle.

Microsoft's recent product decisions indicate that Power BI will increasingly require other Fabric components to fully utilize its functionality. This will not only lead to additional costs as customers begin using these other Fabric workloads, but may also introduce duplicative products and services that many customers may not want or need.

This phenomenon can be witnessed in how Microsoft has begun **retiring and redistributing** existing Power BI features to other Fabric components in order to incentivize adoption. One example of this can be seen in how AutoML in Power BI has been **retired** and is now moving to Fabric Data Science. This is significant in that it not only negates the standalone functionality of Power BI, but it also necessitates that customers begin to use the other Fabric services. As customers begin to use the other Fabric platform components, it further locks customers into the Microsoft stack, restricts the ability to use Power BI in isolation, and ultimately drives up customer usage and corresponding Microsoft Fabric spend.

## Fabric platform costs

With Microsoft Fabric, there are also entirely new cost implications to consider. This will be especially challenging for existing customers who may have budgeted and made procurement decisions based upon a BI tool, not a full fledged platform bundle.

These additional cost considerations only start to become apparent as customers begin to use the platform. For example, while a level of data storage for Power BI is included in their Fabric capacity, this is not the case for data used by the other Fabric components. As customers begin to have to ingest and store data in the Fabric's data layer (Onelake), additional data storage costs begin to accrue independent of Power BI. This further adds to the unpredictable nature of budgeting for Power BI as a standalone tool and makes it difficult to predict analytics costs in isolation from the rest of the platform.

These are just a few of the new hidden cost considerations that Microsoft Fabric introduces. Integrating Power BI with Fabric transforms the choice from selecting an analytics tool to adopting an entire data platform. This shift complicates forecasting analytics costs and may introduce redundant features into an organization's existing data architecture.

## 3 Hidden Product Complexities

On the surface Power BI offers a broad set of functionality. Organizations that tend to evaluate BI tools with “feature-function”-type RFPs see these many features and functions offered, but what they often overlook are the core product nuances that restrict broad user adoption, limit user productivity, and inhibit corresponding value. A few of the most salient examples include:

### Direct Query limitations

Increasingly, organizations are requiring that their BI solution be able to establish a direct connection to their cloud database or data lake. This allows organizations to query data in-database without having to replicate and extract a copy of the data, while simultaneously improving query performance by leveraging the computational power of their cloud database engine.

At first glance, Power BI does in fact support live query with Direct Query. Yet what isn't initially apparent, is that there are substantial limitations to the functionality that restrict the ability for Power BI to query data live beyond the most basic of use cases. These limitations often require customers to then revert to “Import Mode” to extract and replicate data out of their cloud data lake and into Power BI's in-memory engine to improve performance and functionality. This practice not only negates the value of the modern cloud lake, but simultaneously drives up Microsoft Fabric capacity costs as customers increasingly ingest more data into the platform.

In fact, Microsoft's own documentation [refers](#) to their own existing Direct Query functionality as “slow.” As a response with Microsoft Fabric, they've announced that they have attempted to fix this inherent limitation with a new query type called Direct Lake. Direct Lake claims to have solved for many of their initial live query limitations, but it only works when the data is brought into Microsoft Fabric. This is just one additional way to incentivize customers to move data into the Fabric platform, limiting the value of heterogeneous data architecture investments, and ultimately driving additional Fabric consumption.

## Data Analysis Expressions (DAX)

DAX is a foundational code language used across a variety of Microsoft tools, including Power BI. While it allows for those with developer skills to perform complex tasks, it is a nuanced language that requires a **high level of technical aptitude**. Many customers underestimate the complexity DAX presents, only to realize the challenges as they begin to scale analytics across the organization. This ends up leading to the business being reliant on a handful of users with an IT skill set, and ultimately becomes a substantial barrier to wider adoption.

## M Code

Successfully delivering on Power BI initiatives requires more than just analytics and data visualization skills. Power BI is itself a bundling of several legacy technologies that are stitched together as a single offering. One of these technologies is Power Query, which serves as the data modeling tool bundled with Power BI Desktop (or reskinned as Dataflows in Power BI Service). While it offers some robust functionality, it again requires that customers learn a completely separate code language called M to make full use of the solution. While M may also appeal to those with a high level of technical ability, the UI/UX is completely different from that of Power BI, requires another unique skill set, and creates yet another hurdle in order to make use of the full end-to-end capabilities of Power BI.

The examples cited above are just a few of Power BI's unique product intricacies that begin to appear as customers start to use the platform. There is a high level of technical aptitude required to make full use of the technology, there are limitations of using the tool outside of the Microsoft Fabric ecosystem, and there are significant time and labor costs that are necessary to scale the platform. These costs don't typically show up on a line-item budget, but they do appear as downstream repercussions that ultimately affect productivity, adoption, and corresponding value.



## 4 True Cost of Adoption

This brings us to the most important element to consider when selecting a BI platform—the value that can be achieved through analytics. It is well known that license acquisition costs are just a fraction of an overall analytics spend. What customers ultimately want in an analytics solution is assurance that they can facilitate user adoption, drive better analytical outcomes, and ultimately differentiate in their industry with data-driven decision making.

While Power BI's low upfront licensing costs can be attractive, customers should also consider the value side of the equation. Just because you can give everyone a license doesn't mean users can actually make use of the platform, and it ultimately can lead to additional labor and headcount costs. A few examples of these costs include:

**Data engineers** Any BI platform requires that data be shaped in the right format for analysis. Yet with Power BI, it's especially crucial that upstream data transformations and data modeling in Power Query can be performed in advance of downstream analytics. This requires a unique skill set that's often separate from those who are developing analysis and is commonly overlooked when customers initially deploy Power BI.

**DAX developers** What can make Power BI attractive to some developers is the same thing that can inhibit the ability to scale the solution widely across the organization. The data engineers who build data models using Data Flows or Power Query are often entirely different from the users who have the skills and domain expertise to conduct analysis. Power BI's dependency on DAX for dynamic calculations requires yet another specialized skill set that becomes critical as business user demand increases.

**Administration and governance support** With Power BI now firmly embedded within Microsoft Fabric, there are even greater dependencies on a centralized IT team which requires significant time and expertise to administer and govern. Just one example is how all Microsoft Fabric user group permissions are managed at the central Azure AD tenant level; this slows time to value and places a heavy reliance on a handful of platform administrators. This can lead to a lack of business user agility, organizational bottlenecks, and an inability to support a federated governance model.

These are just a few examples of the hidden complexities with Power BI that can lead to additional headcount costs. While Power BI may look like a self-service analytics platform on the surface, the reality is that it is highly dependent upon those with developer skill sets and increasingly reliant on the rest of the Fabric platform—which creates a web of complexities that inhibits optimization and scalability.

# Conclusion

When evaluating business intelligence platforms, it's critical to have all the facts so you can ensure the right fit for your organization. An all-in-one analytics platform like Microsoft Fabric might sound ideal at the onset, but it's important to fully understand the broader implications of making that decision along with the corresponding hidden costs and product limitations.

To harness the power of data analytics, understanding the true cost and complexity of your chosen platform is paramount. **While Power BI's initial appeal draws organizations in, the reality of hidden costs and complexities can present challenges**—from licensing intricacies to the operational impacts of product limitations and the comprehensive nature of the Microsoft Fabric.

As IT leaders and analytics buyers consider their options, it's essential to look beyond the surface-level of low upfront costs and consider the long-term implications on budget, resources, and strategic objectives. By gaining a comprehensive understanding of the total cost of ownership and the potential hurdles associated with Power BI, you can make a more informed decision that ensures your organization's analytics capabilities are both robust and sustainable. Ultimately, choosing the right data analytics software is about finding a solution that not only meets your immediate needs but also supports your long-term vision for data-driven success.

**Get started laying the right data foundation for successful business outcomes in your organization. Access your [free Tableau trial](#) today.**

