

# Composability for Decision Intelligence:

Getting insights where you need them

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# Summary

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Most organizations have a slew of centralized analytics software and solutions in their arsenal that solve particular use cases or business problems. However, in order to comprehend the zettabytes of data that flood into a company, analytical teams must continuously find new ways to unlock its value.

Business leaders have now started evaluating better ways of making information accessible to end users via Decision Intelligence. This strategy involves utilizing existing analytics assets while incorporating a new and enhanced augmented analytics product. The ultimate goal of stakeholders will be to create composable analytics applications to provide a seamless user experience to the end consumer, thereby strengthening decision-making.



# Composability

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Businesses' needs change over time. Rapidly evolving companies require application architecture that enables agility, flexibility, integration and innovation. Traditionally, all-in-one monolithic architectures used to attempt to serve all business needs with one solution. This forced teams to work with the functionality available rather than the best tools for the job. On the other hand, in this modern era, microservice-based architecture powered by composable applications allows teams to integrate the technology most appropriate for their needs.

As such, having modular, composable solutions that are creative and adaptable is vital. Composability<sup>1</sup> is defined as:

“ A system design principle that deals with the inter-relationships of components. A highly composable system provides features that can be selected and assembled in various combinations to satisfy specific user requirements. ”

Composable applications enhance the operational dynamism of next-generation services and apps while lowering the operational complexity of traditional workloads. Effectively, the trend of “composability” is here to stay. Businesses must invest in composable applications and infrastructure in these times. To keep up with the growth of their competitors, they must employ composable apps to increase their output, speed and access to information.

## What is composable data analytics?

Composable data analytics is a process by which organizations combine and consume analytics capabilities in various applications. This system applies across the enterprise, ensuring more effective, intelligent, and above all, faster decision-making. Composable data analytics uses various tools, techniques, and technologies that quickly link data to actionable insights.

Composable data analytics applications are the quick and easy path to building analytics experiences tailored to specific business needs. They are an extension of the “composable enterprise.” Coined by Gartner<sup>2</sup>, this term describes a modular approach to digital service delivery and software development. A composable enterprise represents the transition from monolithic technology and code-based software development. It paves the way toward composition-oriented architecture and interconnected ecosystems of interchangeable

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<sup>1</sup> <https://medium.com/coinmonks/the-true-power-of-defi-composability-14fe8355e0d0>

<sup>2</sup> <https://www.gartner.com/smarterwithgartner/gartner-keynote-the-future-of-business-is-composable>

applications using low-code/no-code capabilities. Gartner calls these composable data analytics applications packaged business capabilities (PBCs).<sup>3</sup>

Without disrupting the rest of an application's activities, PBCs enable teams to rapidly redefine and evolve their apps in line with their business needs. In other words, they have a plug-and-play application architecture that makes it simple to configure and modify the various components.



## Why is composability important?

Composable data analytics help organizations reimagine how they acquire, clean, store, and analyze massive volumes of data. This data can be on on-prem or cloud storage devices or spread across multiple locations simultaneously.

This data analytics strategy shortens development timelines and saves time for end users. This makes developing novel products and solutions easier for increased productivity. This method saves time and money on software development by disassembling complex applications into interchangeable jigsaw pieces. It also assists in lowering overall expenses and enhancing performance to meet changing business expectations. Effectively, it comes down to having an insights system containing sub-components that can be selected and assembled in many ways to satisfy specific requirements on behalf of the user.

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<sup>3</sup> <https://www.gartner.com/en/doc/465932-future-of-applications-delivering-the-composable-enterprise>

The need for composable data analytics is now being felt in the post-COVID-19 pandemic world. Businesses are forced to be agile and ready to tackle any uncertainty head-on. Stakeholders need applications that can quickly enable new business scenarios. As such, they require means of developing tailored analytics experiences with modular capabilities rather than monolithic ones.

## What makes composability a match for Decision Intelligence?

Decision Intelligence (DI) is about getting the correct information at the right time to drive context-driven business outcomes.

Forbes<sup>4</sup> explains that:

“ Decision intelligence is a new field that helps support, augment and automate business decisions by linking data with decisions and outcomes. It uses a combination of methods (e.g., decision mapping and decision theories) and technologies (e.g., machine learning and automation) to improve the way decisions are made in companies. ”

DI is about knowing what questions need answering and being able to answer them effectively with insight from analytics software solutions. Still, making decisions can be difficult. Unfortunately, people who lack the necessary knowledge, time, or experience are more prone to making the wrong decisions that are detrimental to their business.

Currently, Business Intelligence (BI) tools provide reasonable solutions to data analysts. They do well in:

- Aggregating data
- Performing written analyses of data
- Reporting on data in an efficient, repeatable manner
- Providing the results to business users in the form of dashboards

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<sup>4</sup> <https://www.forbes.com/sites/forbestechcouncil/2022/05/25/is-decision-intelligence-the-new-ai/?sh=31930a6d4e42>

Even still, today's BI tools have failed to expand the availability of insights beyond data analysts. While BI tools are remarkable, their dashboards generally fail to unearth the value contained in the underlying data.



Ultimately, BI tools create convenience for data analysts but little value for business users.

Moreover, other challenges related to access, availability and experience in BI continue to persist. These include:

- Delayed time-to-insight when handling multiple dashboards created from the same data source
- Delayed delivery of analytics applications that can be modularly assembled
- Limited ability for business users to drill down and get answers without technical training
- Inability to provide seamless and quick conversion of insights to actions
- Inability to keep up with the needs of business decision-makers

As a result of these pitfalls, business users, the ultimate end-consumers of the insights in business data, remain unfulfilled. Sure, business users need to be able to look at dashboards to see the historical performance; however, to uncover deeper insights from data, they require

context and interpretation. Context is about exploring “why” questions, while interpretation is about exploring “what if” and “what will be” questions.

The demand for efficient context and interpretation of data is soaring. The explosion of post-pandemic digital touchpoints and the soaring necessity to master change, be proactive, and instantly bring efficient modifications to the data architecture and analytics processes have been the driving factors for composable applications. Ultimately, organizations need to widen the focus of their analytics initiatives away from only helping data scientists. Their decision-making strategies should also amplify business users’ ability to make real-time decisions.

Composable analytics applications are one of the latest technology trends that enable digital transformation goals and better business outcomes for enterprises.

## Re-stacking composable analytics for Decision Intelligence

As more and more organizations seek the benefits of using ready-to-use building blocks to improve decision outcomes, the rise of Decision Intelligence powered by composable data analytics applications is a forward-looking trend.

Here are four ways that composability is reimagining Decision Intelligence for modern enterprises.



### Composability realigns the always-on, anytime, anywhere data needs

The constant data demand for Decision Intelligence indicates that analytic tools can no longer rely solely on historical data for insights. Decision-makers need on-demand access to current trends and future data behaviors regardless of where they reside. This move requires intelligent orchestration, discovery, scheduling and management of data assets from any data source at any time. Since most companies have a combination of cloud and on-premises applications, composable building blocks are designed to integrate with systems in both environments and work seamlessly to support business requirements.

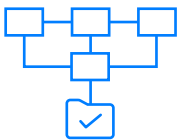




## Composability remodels the data architecture for speed and flexibility

Composable data analytics is a framework that utilizes a microservices-based architecture that flexibly allows application developers and end-users to create their own analytics experience by leveraging existing assets. A containerized approach makes analytics capabilities more composable so that they can be dynamically combined into applications. Alternatively, Application Programming Interfaces (APIs) aid in the composable architecture's pliability and ecosystem supervision. The key to making this plan work is to keep the transformation and analytics separate from the underlying data. Alongside this new architecture, the collaboration between IT and business users becomes easy with rapid application development.

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## Composability redesigns processes to support real-time decision needs

Interoperable solutions leverage the value of shared data, making it possible to get to a single source of truth. This, in turn, supports the decision-making needs of an organization. This setup also accommodates existing assets or tools to the new composable architecture. The tool interoperability allows analysts to pool their expertise within apps and quickly exchange results via dashboards or visualizations. In other cases, it can leverage the already available expensive BI assets and plug in advanced ad-hoc analysis capabilities in a way that doesn't break the user experience or increase efforts to switch between applications.

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## Reimagining the augmented consumer

A composable infrastructure that allows for easy reconfiguration and customization is a must for building composable apps that enable business users to assemble ready-made building blocks to deliver the analytics they need to make decisions.

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Coined by Gartner in 2021, the term “augmented consumer”<sup>5</sup> refers to business users and decision-makers having direct access to personalized, relevant insights to enhance their workflows, productivity, and performance.

With composable analytics, business architecture analysts and data scientists serve as the primary “composers” or augmented consumers. As they utilize these reusable assets, the traditional monolithic business intelligence stack transforms into building blocks for advanced data and analytics. In this system, business users become the ultimate “storytellers.” They are empowered with contextual insights to guide their business to make the right decisions at the right time.

## Composable Decision Intelligence at work: Real-world examples

Composable data analytics apps are comprised of tools that ultimately form a solution. The result is the culmination of intelligent applications that work to connect insights to actions by harnessing low- and no-code capabilities that go beyond embedded analytics and create consumer-focused applications from already existing analytics assets.

Two primary components need to be the focus for analytics vendors. These include:

1. The importance of making analytics exploration more effortless and prosperous
2. The shift from predesigned dashboards to automated and dynamic presentations for data analytics delivery

The Fosfor Decision Cloud is designed with business users in mind. Its capabilities include simple, effective data exploration, automated insight delivery, and the creation of powerful data stories, allowing business users to use a natural language interface to quickly and intuitively discover critical drivers of business behavior. Designed to empower business users with advanced analytics insights, Lumin, the Fosfor Decision Designer, helps get relevant insights from all data faster and easier than ever.

Here are some examples of how the Fosfor Decision Cloud's composability enables Decision Intelligence for the world's leading enterprises.

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<sup>5</sup> <https://www.gartner.com/en/documents/3996988>

## Enabling store-level optimizations for a CPG giant

A Fortune 500 Consumer Packaged Goods (CPG) major was looking to augment the decision capabilities of its Sales & Category teams. These teams had access to multiple BI reports but struggled with scattered insights and information overload. Finding insights on time had become a significant challenge. They spent countless hours each week trying to uncover what to focus on and digging for information supporting transactional reports.

The Fosfor Decision Cloud's Decision Intelligence and composable architecture were a perfect fit because they enabled business users to dive deeply into the root cause of a particular change and conduct a free-form exploration using natural language search.

The second request from this CPG giant was to allow business users to access transactional information in their BI reports quickly. They also wanted to track any changes in their key performance metrics. With the Decision Designer module's APIs and Software Development Kits (SDKs), a composable application connecting all Power BI views was built and integrated with autonomous nudges and advanced analytics capabilities.

Working alongside the BI reports on the main screen, users could deep-dive into any anomaly and understand the deviations quickly. They could also pin their favorite reports and insights in the workspace for sharing with their team. This setup helped improve the application usage and tremendously reduced the decision cycle time.

Taken together, the Fosfor Decision Cloud's composable Decision Intelligence capabilities allowed the client to uncover assortment and inventory optimizations at the store level—with the resulting sales improvements benefiting both the client and the stores selling its products.



## Enabling augmented insights for risk managers and brokers

A leading insurance organization looking to automate reporting of their static portfolio metrics like premiums, claims, and conversion rates also wanted access to ad-hoc querying capabilities to diagnose broker submissions and predict future business scenarios. They also wanted to integrate this into their homegrown customer-focused application so that the entire insights process was embedded in the existing workflow.

Some of the Decision Designer's several augmented analytics capabilities included:



Instant querying



Forecasting



Deep dive diagnosis



Scenario planning

The Decision Designer's SDKs helped their business leaders, risk managers, portfolio managers and brokers get rapid access to actionable intelligence. Furthermore, with the ability to pin curated business insights in the collaborative workplace, the application provided simplified views to senior leadership for easy consumption.

## Improving information accessibility for a major pharma company's commercial teams

The Decision Designer's intelligent APIs are now helping a leading Fortune 1000 Pharma major. With the Decision Designer, they can get a single source of truth across multiple applications to make faster, more informed decisions. Business users can now access all their productivity applications from a single window as a widget. Additionally, they can now deeply dive into their business metrics directly from this application to kickstart their decision journey.

With the Decision Designer's Ask capability seamlessly embedded within the existing BI interface, the business user now wields the power of augmented analytics. With this power, they can uncover exciting trends in their Key Performance Indicators (KPIs) in a matter of

minutes. They can course-correct their decisions using information from other productivity applications. The result? Shorter, more efficient drug development processes and more freedom for managers to focus on innovation.



## The bottom line

The Fosfor Decision Cloud is composing BI with Decision Intelligence capabilities. It is helping customers craft a seamless user experience without creating additional learning curves or building other pipelines for complex integrations.

# The Fosfor Decision Cloud: The Future of DI and Composability

When making decisions, business users search for information across different applications and consolidate everything to get the whole picture. This often leads to scattered information, delayed decisions and missed opportunities, especially in diagnosing what went wrong and why. With composable analytics applications, it has become easy to reshape the contemporary enterprise. Organizations must lean into composable transformation and move away from monoliths. Stakeholders must rethink their approach to BI applications starting with their business architecture and technology stack.

Thankfully, the future of composable Decision Intelligence looks bright.

Recall when infrastructure moved from being Enterprise Resource Planning (ERP)-based to microservices-based. Similarly, in an API-first world, the Fosfor Decision Cloud's Decision Intelligence, powered by composability, will pave the way for transforming data into limitless insight for organizations.

With the Fosfor Decision Cloud, modern enterprises can rapidly achieve smoother business operations and rapid decision-making. It promises to make existing insight assets and resources more elastic and scalable to support stakeholders as they tackle their ever-changing business demands—any time, any place, and from any application.

## Author bio

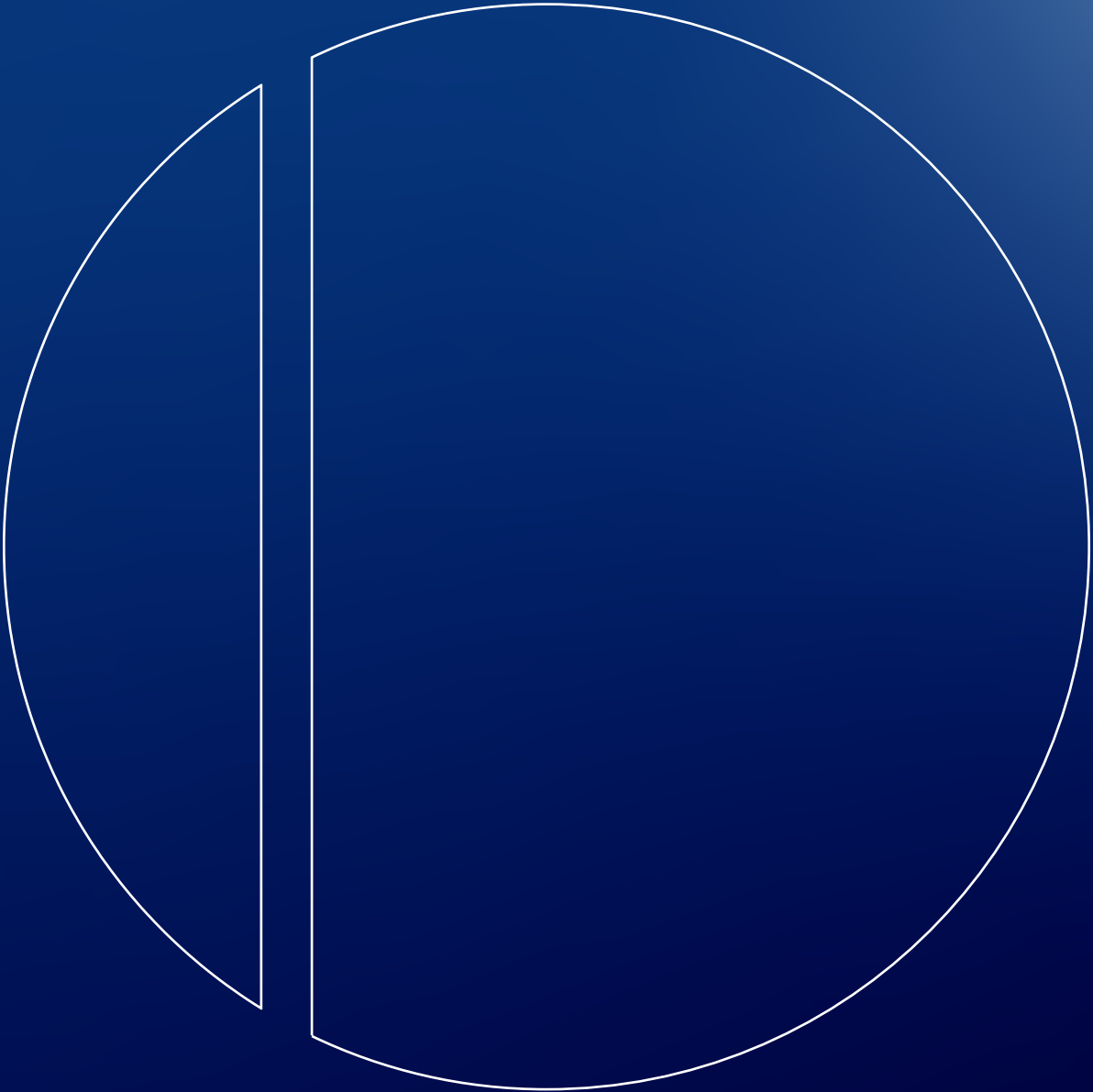


### **Itti Singh**

Product lead,  
Fosfor

With more than a decade of experience spread across analytics, strategy and product management, Itti is known for building strategies that enable businesses to transform with data. Currently leading the vision and storyline for the Fosfor Decision Cloud, Itti is a true product evangelist and a data enthusiast, empowering our customers with actionable data stories.

When not at work or spinning stories, Itti is researching human-focused design, watching Korean series, playing with her dogs, and exploring exciting new food spots with her partner.



The Fosfor Decision Cloud is a connected fabric that unifies and amplifies the value promised by the modern data ecosystem, which is made up of infrastructure, data, and application clouds. Fosfor enables organizations to effectively curate data, generate impactful insights, and formulate effective decisions to deliver the long-sought promise of data and AI: optimal business outcomes. Fosfor is part of LTIMindtree, a global technology consulting and digital solutions company. For more information, visit [www.fosfor.com](http://www.fosfor.com).