HOW TO ACTIVATE MICROSOFT FABRIC IN YOUR ORGANIZATION

USE THIS HANDBOOK TO UNCOVER YOUR DATA'S TRUE POTENTIAL, SPEED TIME TO INSIGHT AND PAVE THE WAY FOR DEMOCRATIZED INNOVATION WITH AI/ML CAPABILITIES.

Contents

WELCOME TO THE ERA OF AI

There's no question that success and advancement in every industry today depends on data. As part of other, ongoing digital transformation initiatives, uncovering data's power and potential often represents more hurdles for organizations that operate with disparate data silos, or teams that must rely on IT to build dashboards and reports that uncover insights too late to gain an edge on the competition.

Microsoft Fabric's all-in-one platform streamlines everything required to truly leverage data for insight and innovation, from data movement to data science, and real-time analytics to business intelligence, helping organizations build a rock-solid foundation for AI and ML capabilities and sustain business value.

Fabric brings together new and existing components, including Power BI, Azure Synapse, Azure Data Factory and more, in customized user experiences based on user roles or functions. Most importantly, Fabric operationalizes and unifies an organization's data sources and workloads on a shared SaaS foundation that offers centralized administration, protection and governance across all user experiences. Fabric democratizes data while enhancing its reliability, speeds time to deeper insights and allows users to advance mission-critical priorities without having to understand the underlying infrastructure supporting their experience.

And yet, Fabric is only a tool: Organizations that have not done the required work to promote a data-first culture and establish mature data governance cannot reap all the benefits Fabric offers. Keep reading to uncover best practices that promote data-first thinking within your teams, align data initiatives and data governance with your business strategy and organizational priorities, and sustain data-fueled iteration and growth.

IS YOUR ORGANIZATION READY FOR FABRIC?

If the 2010s were the era of gathering Big Data, the 2020s have ushered in the era of data-fueled business and digital economy. As artificial intelligence and machine learning capabilities further allow every industry to action all their data and uncover insights humans cannot, one-stop-shop tools like Microsoft Fabric put essential, real-time data in the hands of every employee, empowering everyone to make data-informed decisions and innovate, no matter their role or tech-savviness.

The Next Stop in Your Digital Transformation Journey

> IDC research conducted in Q3 2022 revealed that AI adoption increased three times since 2019, and 50% of survey respondents planned to use AI across business functions in 2023. Global spending on AI is set to exceed $301 billion by 2026, achieving a CAGR of more than 26%, according to IDC's Worldwide Artificial Intelligence Guide (August 2022).

As your organization's digital transformation journey evolves to incorporate AI and ML, it's important to ensure your data strategy remains tightly aligned to your business strategy and mission-critical priorities.

No matter your industry, one of the first questions to ask before considering a new data solution is, "What do we want to build and achieve with our data?" Now consider one of the most common stumbling blocks organizations have been forced to navigate while undergoing digital transformation: disparate data sources and stores.

Where many teams of professionals are now likely dedicated to keeping an organization's data apparatus functioning and responsive to business needs, the possibility of streamlining critical pieces of that architecture to make rapid, data-informed decisions or achieve greater agility and responsiveness, may seem daunting. Microsoft Fabric ushers in a more modern data platform structure and represents a paradigm shift in the ways organizations access and use their data or uncover data insights.

AI Isn't Going Away

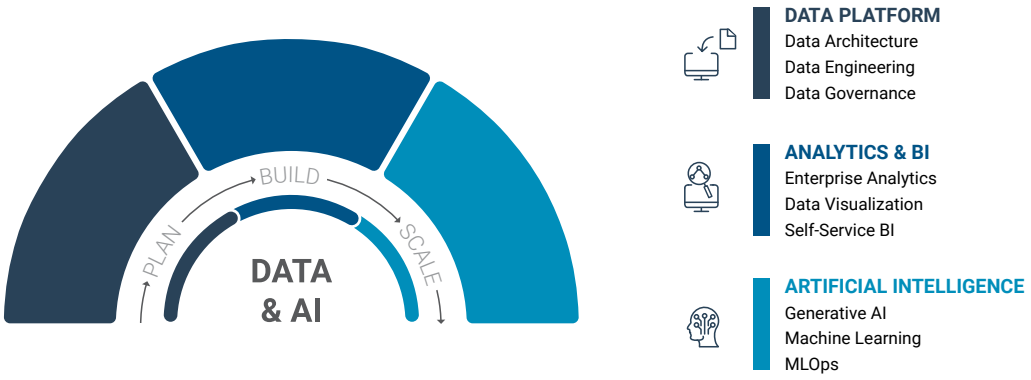
Constructing a solid foundation from which later AI and ML initiatives can be readily launched will help forward-looking organizations gain an edge on their competitors. Unfettered access to data, strong computing and processing power wherever data is generated or lives, and built-in analytics and engineering capabilities that allow teams to visualize and operationalize data or models represent only a few of the building blocks included within Microsoft Fabric.

"The concept here is very new," says Eric Wozniak, Enterprise Sales Director at 3Cloud. "The organizations that are going to adopt this in the short term are trailblazers. They've done the risk-reward calculation and it's worth it to them because of the capabilities, the business value and getting an early lead on their competitors."

As a trusted Microsoft partner, 3Cloud can help organizations of all shapes and sizes architect and design Microsoft Fabric properly, accelerating implementation and adoption so that "you don't stub your toe out of the gate," Wozniak adds. "We'll be your advisor and partner along the way, serving as your guide on the journey, helping you to adapt or adopt Fabric's new features and functions as they come along and skill up your teams so that they develop deeper understanding and knowledge of this new paradigm and the specific skills needed to use Fabric effectively."

What Fabric Means for Data and Analytics Initiatives

An organization that adopts 3Cloud's so-called "virtuous cycle" of data and analytics undertakes solutions to business challenges or opportunities in three data and analytics stages: plan, build and manage (then repeat!).

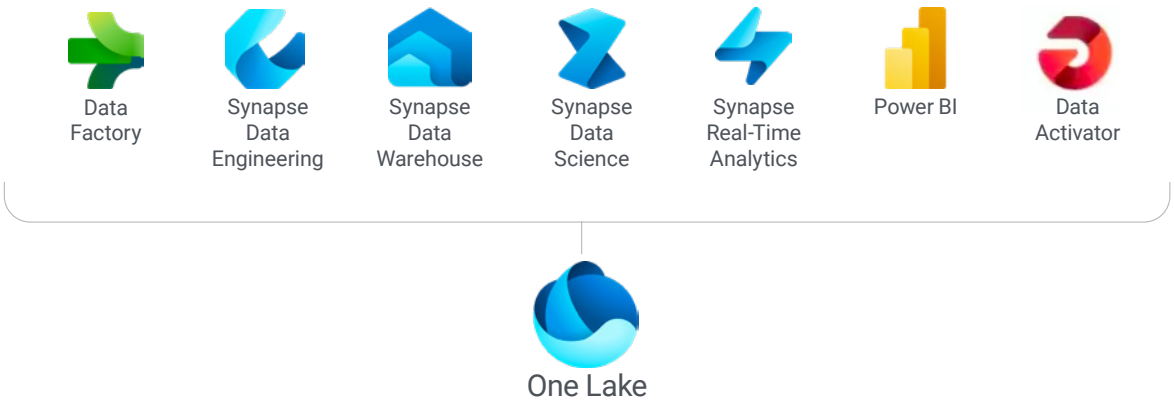


In data and analytics solution areas or workloads, 3Cloud further defines the space through three perspectives: data platform, business intelligence, and data science and AI. Each of those functions should be applied in concert to ensure organizations realize the full benefits from their investments in the space.

Microsoft Fabric allows organizations to achieve greater value through adoption, by integrating otherwise separate data and analytics tools and functions within one cloud-delivered solution that empowers organizations to achieve truly insights-driven decision-making by:

- Exploring and visualizing data easily, making it simpler to identify patterns and trends
- Empowering users with self-service analytics, reducing reliance on IT or data teams
- Leveraging advanced analytics techniques like predictive modeling and machine learning
- Establishing robust data governance and security measures that maintain data integrity and compliance
- Ensuring scalability and high performance when processing large amounts of data

By democratizing and unifying access to an organization's data through the OneLake architecture, Microsoft Fabric streamlines several existing technologies into a single SaaS environment:



But First, Establish Data Governance

At a high level, data governance refers to the ongoing efforts required for the success of all data management and usage disciplines, including data management, ownership, security and privacy, data architecture, integration, warehousing, data lakes and business intelligence.

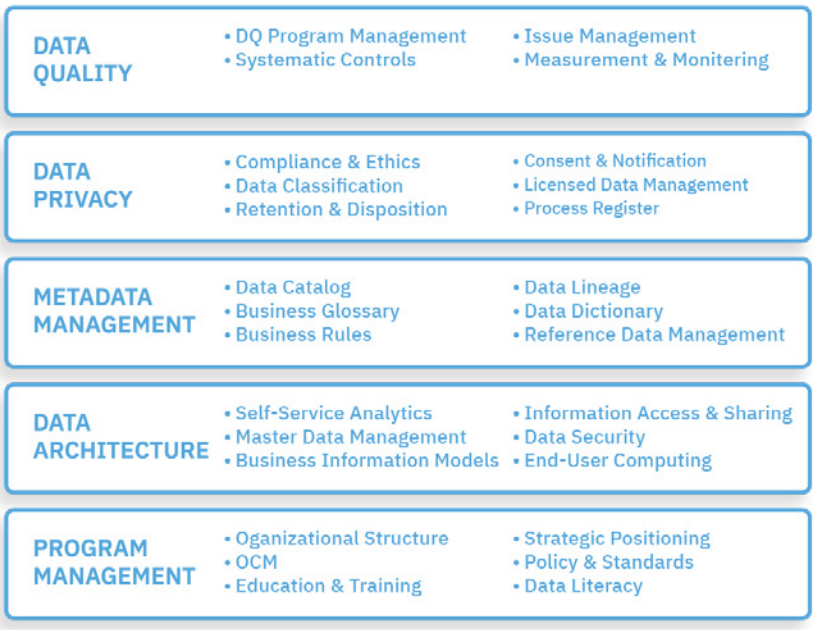
A data governance program prepares rules and regulations that ensure an organization can deftly handle any issues that may come up regarding data. An effective governance program also ensures (and documents) compliance with policies or requirements while providing a guide to some of the most important questions that must be answered around data:

- What data do we have?
- Where did this data come from?
- How is this data used?
- Who is responsible for this data?
- Can we trust this data?

"Data enhances digital transformation. It must be governed and managed properly," says Bill Martin, Data Strategist at 3Cloud. "For the customers that get it right, we see five areas that they prioritize in terms of their strategy: Identify your data. Provision your data. Store the data.

Integrate the data. Govern the data. You need to put policies, reporting and compliance around what you're doing with your data to ensure you're following legal and geographic requirements, encryption and security. And you must keep all these pieces in mind when you're thinking through your data strategy."

3Cloud's data governance methodology features five proven competencies or pillars that serve as the backbone of our framework. Broken down into key markers, these competencies allow organizations to streamline assessment and more effectively manage related implementations:



Proper data governance establishes appropriate guardrails that ensure users enjoy access to the data they need while minimizing risk. Achieving the proper balance between user freedom and administrative controls also encourages a healthy organizational data culture, which is particularly important within organizations seeking to promote and cultivate a data-first approach to business. Proper data governance also allows organizations to monitor and respond to user behaviors, establish centers of excellence with executive sponsorship and iterate upon or define an organization's governance strategy. Organizations should continuously review and update governance strategy as products (such as Fabric), users and the broader organizational data culture evolve.

PROMOTE A DATA-FIRST CULTURE

Not every organization has achieved a data-first mindset among employees, particularly where self-service analytics has yet to be adopted or deployed. Data-intensive work, while critically important to the day-to-day success of the marketing organization, for example, may fall to the few over-worked analysts who built out Power BI dashboards with their IT or marketing operations teams. Time to insight is delayed, as is business responsiveness when a problem or challenge is uncovered too late.

Decision-making can be accelerated as a data-first culture matures. Organizations can do more to seek out and hire more data scientists, architects and engineers, however those skills remain in short supply and competition for those talents remains high.

"Changing how you attract and retain is a long-term fix," advises Jorgen Heizenberg, Gartner VP analyst for data and analytics leaders.

"Organizations should not ignore the importance of retaining existing talent by developing data literacy programs that improve or advance knowledge among current teams," Heizenberg says.

In many organizations' digital transformation journey, adoption of a data-first mindset remains ongoing, often hindered through siloed or fractured data access and lack of knowledge or understanding of how to use tools that deliver insights or business intelligence. "Businesses or organizations without mature data governance policies in place should not be discouraged or dismiss Fabric's potential," says Steve Hughes, 3Cloud's Senior Director of Data and Analytics.

"Fabric might actually help them accelerate that process because in Fabric you can make very clear delineation in your data, how it's shared, all that eventually can be done more easily in that environment than in say, Azure, where you have to manage all of the individual components," Hughes says. "You could use Fabric as your place to start working that out because it kind of forces you to. It's not a bad thing."

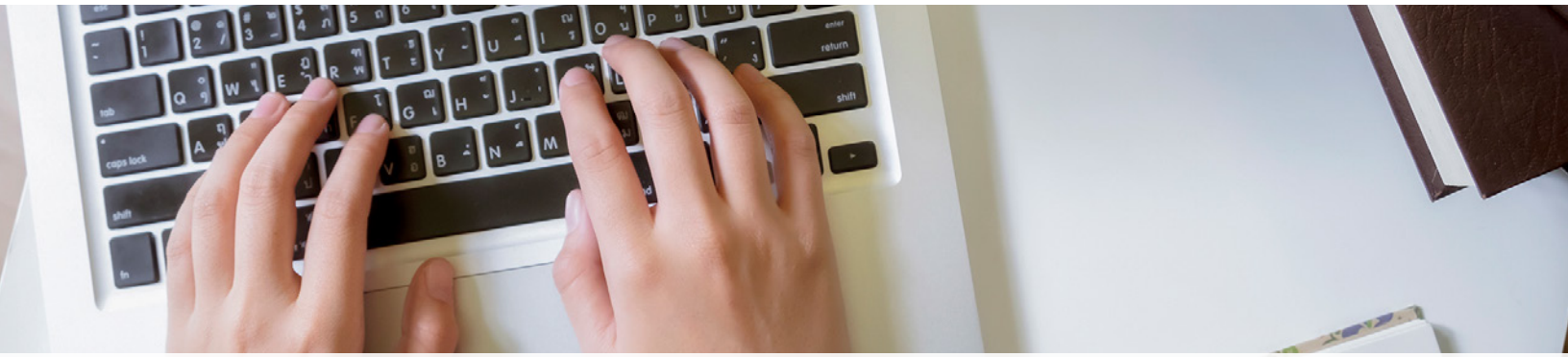
Among many other stand-alone tools now integrated into Fabric, Purview — Microsoft Azure's unified data governance service — ensures out-of-the-box capabilities that help organizations tackle cumbersome governance work.

Training programs that reskill or upskill employees for role-specific technical skills and certifications, as well as improve soft skills such as collaboration and data storytelling or visualization, go far in establishing and achieving data-first thinking within the broader business.

While data can be emphasized and prioritized in decision-making, a data-first culture will never be fully embraced where teams do not trust the data they're relying on to make mission-critical decisions or recommendations. Beyond trust in the data itself, the emergence of so-called "ethical artificial intelligence" calls for establishing trust in AI solutions, explainability, accountability and ethics.

"You really have to think through who owns the data, who owns the access to the data and where your compliance pitfalls lie," Hughes advises. "Depending on the industry you're in, Fabric could work out really nicely by building great isolation and sharing, but you must plan and prepare for that. You must think about it in that way, you can't just let it happen. It will not happen by itself.

"If you are regulated as an industry, you've got to ensure your compliance plan is in place for Fabric before you kick off because Power BI is included in Fabric. You'll need to figure out management there all the way through OneLake."



Scorecard: Assess Your Data Governance Maturity

Ensuring users have the data they need to run the business while minimizing risks is easier said than done. While Fabric can help organizations streamline data access by roles or lines of business, sound data governance stands as the bedrock of all that a data-first organization sets out to achieve, and remains even more critical as metadata proliferates, particularly when embarking on AI/ML capabilities or development.

3Cloud's data governance assessment helps businesses and organizations understand where they should focus to establish or improve governance, identifies gaps or opportunities to enhance governance strategies and offers guidance for future planning.

Review each statement and assign a score of 0 (none), 1 (low), 2 (moderate) or 3 (high) based on your agreement or progress in each area. Total your response scores for each section to identify areas of governance that require additional focus. Add each section score and then determine the average to arrive at your overall maturity level.

Pillar 1: Data Privacy

	Score
Does your organization have a set of policies, procedures and tactics in place for consent management?	_____
Do you have a data retention and disposition strategy in place?	_____
Does your organization audit data access controls?	_____
Does your business effectively manage data classifications such as PII (Personal Identifiable Information)?	_____
Does your organization keep current with data privacy and compliance regulations and changes?	_____
Total	_____

Pillar 2: Data Quality

Does your organization have data management training programs in place?	_____
Does your organizational structure support data validation activities?	_____
Can most employees across your organization understand and communicate the value, use and meaning of data integrity?	_____
Has your organization standardized data formats?	_____
Total	_____

Pillar 3: Metadata Management

Do you have a set of policies and standards in place to manage metadata? _____

Have you established a process for gathering business definitions? _____

Has your organization developed a data dictionary? _____

Has your business widely implemented a Data Asset Catalog tool? _____

Has your organization established an inventory of systems and databases used? _____

Total _____

Pillar 4: Data and Information Architecture

Does your organization have policies in place for collecting, using, storing and managing data? _____

Is your organization up to date on data security measures (policies, encryption, access, authentication)? _____

Do you have the appropriate systems in place to leverage data to advance operational performance? _____

Does your organization use business intelligence tools to analyze relevant data? _____

Do your employees and teams have a unified understanding of the systems and tools available to perform data analytics? _____

Total _____

Pillar 5: Program Management

Is effective program management in place for data governance initiatives? _____

How would you rate organization-wide data literacy? _____

Does your organization have an organizational change management process in place? _____

Is there company-wide understanding, and identification, of the data steward and data owner for different data assets? _____

Does your organization understand data usage across all areas of the business? _____

Total _____

Overall Maturity Score (Add all section totals and divide by 5): _____

What does your overall maturity score mean?

1 — Aware

Your organization is likely aware of the key issues and challenges surrounding data governance, but lacks the budget, resources and/or leadership buy-in to make meaningful advances. While lack of investment in new technology may contribute to your current maturity level, you may realize greater value by first addressing people and process challenges.

2 — Reactive

About 30% of 3Cloud assessment participants match this score. Your organization likely operates in a reactive mode, and has not addressed data issues until problems arise, in the form of significant business losses or shrinking competitive advantage. While your organization may desire to perform in a more forward-looking way, you may not be sure how to get there. Start with an agreed upon enterprise strategy that aligns to business goals.

3 — Proactive

About 40% of 3Cloud assessment participants match this score. Typically, your organization proactively addresses certain areas of data governance, but has not yet established a forward-thinking strategy. While you may understand that data governance plays a role in driving innovation, you have not yet aligned IT initiatives to business outcomes. Develop a roadmap that includes perspectives from key stakeholders within your organization, achieve agreement and alignment on business challenges as well as goals that can be influenced or achieved through data and analytics processes.

4 — Champion

Only about 15% of 3Cloud assessment participants achieve this score. Those that do are clear champions within their industry, using data and analytics strategically to outperform their peers and competitors. Your organization takes a decidedly managed approach to analytics, with effective people, processes and technologies, and stands ready to equip every department with self-service capabilities.

5 — Leader

Your organization stands as a true data governance leader, among fewer than 5% of organizations throughout the world. Consider this result proof that your organization has done everything in its power to succeed. Your organization should be emulated and serve as a model for how to effectively use data and analytics to your competitive advantage. You have a clear data ownership model, reliable data, rapid time to insight and streamlined operational efficiencies. You have the power to unify IT and your business behind common goals and foster cross-functional collaboration. Congratulations!

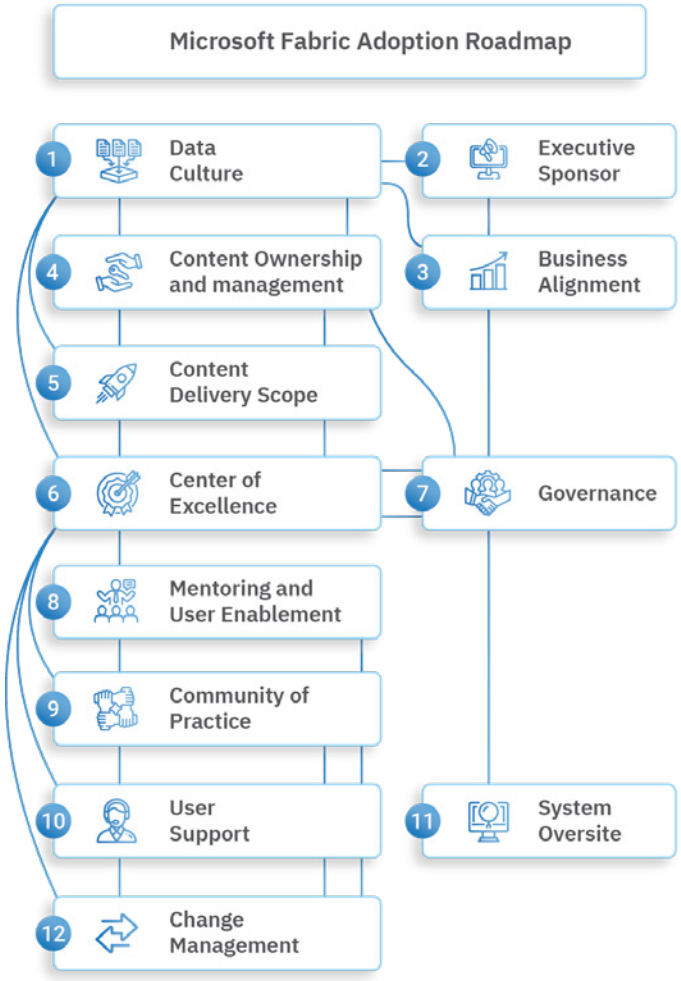
RECOMMENDED READING

3Cloud's white paper, "**The Streamlined Approach to Enterprise Data Governance**," outlines ways to establish a successful data governance program.

Making Sense of It All

Assess teams' data literacy regularly before developing relevant training and organization-wide education, which are also essential to steps on the path to Fabric adoption and ongoing use of any self-service analytics tools. Cultivating and encouraging broader data literacy will help organizations ensure all teams are primed to work in lockstep toward the objectives and goals they will ultimately leverage this data to achieve.

As you progress through this guide, you'll learn more about how to effectively communicate Fabric's value to key stakeholders, empower and enable self-service analytics and other data-focused teams, as well as use cases and case studies from organizations that have already adopted Microsoft Fabric.



Where will you start?

3Cloud's experts are ready to help your teams leverage the experience we gained while working with Microsoft Fabric through its preliminary and preview stages. We can provide guidance on how to apply and work with Fabric every step of the way, and you may even qualify for Microsoft funding. **Contact us** today to get started.

COMMUNICATE FABRIC'S VALUE TO STAKEHOLDERS

Single-source-of-truth data access, comprehensive insights, centralized security and governance management, and faster decision-making top the list of Microsoft Fabric's advantages. When making the case to deploy Fabric, those key points help everyone understand the platform's potential to solve customers', employees', partners' and suppliers' unmet needs, and ease adoption down the road.

Emphasize Fabric's Key Advantages

While some organizations have harnessed and leveraged their data successfully, most have not. Despite significant investment in data and analytics, many organizations struggle to realize business value from their data. A recent study by Harvard Business Review revealed that only 20% of organizations empower their employees with the tools they need to make strategic decisions from their data.

Historically, organizations have managed AI/ML and data science in separate divisions or departments. Whether managed or operated within a business unit, in IT or both, those groups generally function in a disconnected way from the traditional data warehouse team. Ongoing challenges around how to get data to the many unique teams that need it — and whether

they should be permitted access — can now be managed more simply under one roof with Microsoft Fabric. Not only can the many business and data functions that frequently work with the same data now use the same platform for their work, but they can also easily share their work product or results.

"If I'm the VP who oversees analytics, I certainly care that those things all live under one roof and under one platform, and this is the platform for analytics innovation, creating AI models and gaining advanced insights," 3Cloud's Eric Wozniak says.

What does effective stakeholder communication entail?

- When communicating Fabric's value to stakeholders, make sure to tailor your message to the stakeholder groups you're looking to gain buy-in from.
- Gain an understanding of those groups' challenges and use stories or examples of how the tool has helped and benefitted similar groups or teams in your industry.
- Where your organization's data strategy has been clearly aligned to the business strategy, help leadership understand how the goals or objectives of that aligned strategy can be enabled and advanced through Fabric's embedded tools. Fabric can deliver improved sales analytics and therefore improve sales and margins, for example, or uncover supply chain efficiencies that will drive cost savings.
- Consider possible objections, and prepare to offer solutions, facts or supporting information to meet or overcome them. Don't sugarcoat or oversimplify what will be required.
- No matter your message, be sure to communicate it clearly and concisely, using clear language while avoiding jargon and highly technical language.

DRIVE YOUR BUSINESS VALUE ROADMAP

When meeting with other stakeholders and department leaders, an ideation session can help teams identify the initiatives that will drive the most business value once your data estate is unified. Consider initiatives that can drive some initial momentum and can be iterated on or scaled throughout the broader organization. Microsoft recommends focusing on the following questions to quickly uncover meaningful initiatives aligned to business strategies and priorities:

1. How can we enable innovation with data and analytics for (y) our department?
2. What innovation(s) can we enable?
3. How can we make (y)our line of business more efficient?
4. What immediate initiatives can we collaborate on, and how will we measure the impact?
5. What business value will we deliver over time? Cost reduction? Revenue generation?
6. How can we better enable (y) our line of business to use data in decision making?
7. What security and governance concerns should we be aware of?
8. Is there third-party or IoT data that could enrich (y)our insights?

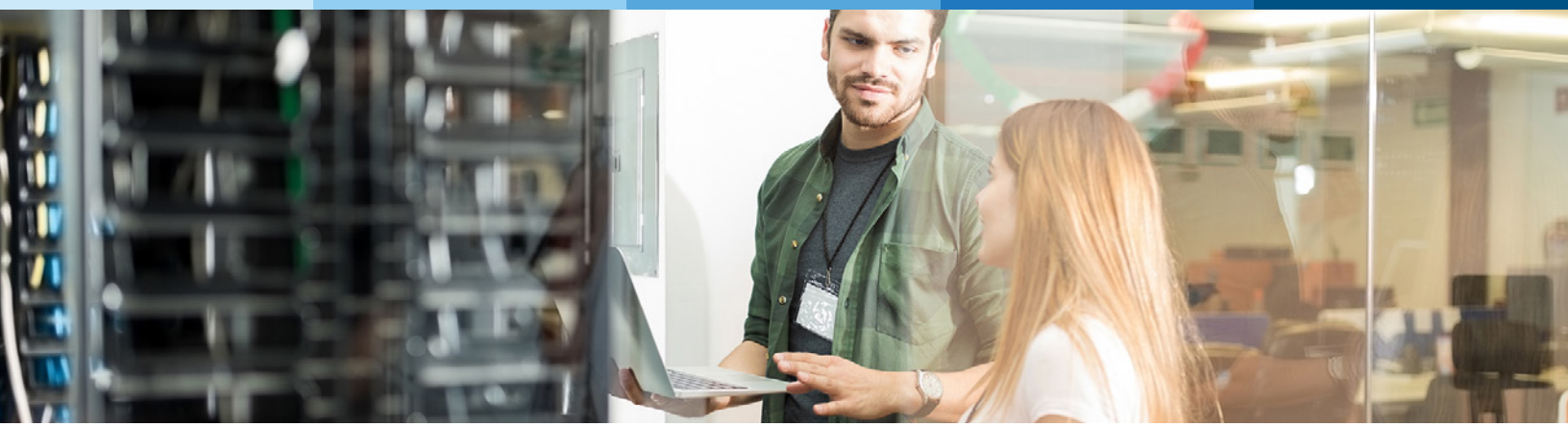
Advantage: Out-of-the-Box Governance

With Fabric, there is no infrastructure to set up or manage. Any data that lands in OneLake, Fabric's unified data layer, will automatically take part in out-of-the-box data governance such as data lineage, data protection, certification and catalog integration. All data ultimately falls under the control of a tenant administration; however, different business groups can work together or independently without going through a central gatekeeper.

With Microsoft Purview (included in Fabric), organizations can establish robust data governance and security measures to ensure data integrity and compliance. Purview Information Protection allows admins to apply sensitivity labels across Fabric content, which are visible and inherited as data moves through the environment

Advantage: Unified, Democratized Data

OneLake simplifies an organization's data estate, allowing easier governance and ensuring all Fabric users have access to all kinds of data, from traditional relational databases to files and APIs. And OneLake's SaaS experience eliminates the need for users to understand infrastructure concepts such as resource groups, RBAC (Role-Based Access Control), Azure Resource Manager, redundancy or regions. It also doesn't require users to have an Azure account.



> “If you’re using AWS Redshift — the database that they’re using to manage perhaps a manufacturing control system — a Fabric Shortcut essentially will make that data available very easily, with all of the security, authentication and connection information”

OneLake enables self-service data and insights by removing IT as a traditional blocker and enables distributed ownership through Fabric’s workspaces interfaces. Workspaces can have their own administrator, access settings, geographical region and capacity (in addition to other customizations) and allow different users and business units to contribute to OneLake while maintaining control of their data.

Workspaces make it easier for different user personas, at different skill levels, to consume organizational data. Access can be set at the tenant, capacity, domain, workspace or item levels, improving data accessibility while maintaining necessary governance. OneLake allows users to leverage data within a variety of included solutions such as Power BI or Data Factory.

Mirroring and Shortcuts enable existing data solutions to integrate with Fabric, opening data access from within OneLake or other storage sources without duplicating the data. Data ownership is preserved, and data is reused as needed.

“If you’re using AWS Redshift — the database that they’re using to manage perhaps a manufacturing control system — a Fabric Shortcut essentially will make that data available very easily, with all of the security, authentication and connection information,” says Paul Turley, Director, Competency Lead at 3Cloud. “Now, developers within Fabric can simply import from that Redshift data. Microsoft has made that as simple as it can be.

“Mirroring allows you to replicate the data in a foreign database, whether on-prem or in another cloud. The data synchs up and is present within Fabric in a Lake House. Once the security is configured, you have an exact copy of that database sitting inside of Fabric, and working with that data is very easy within the Fabric ecosystem,” Turley explains.

Advantage: Powerful Processing and AI Readiness

Streamlined access and governance also lay a solid foundation for AI and ML capabilities. Users can explore and visualize data easily, making it simpler to identify patterns and trends and leverage advanced analytics techniques such as predictive modeling and machine learning. Teams are equipped with access to every tool and can work seamlessly across all analytics workloads.

Generative AI-powered features like Copilot enable teams to quickly resolve challenges or problems, generate solutions and create dramatic visualizations and reports that can be easily shared.

Check out 3Cloud's blog to discover the many ways
AI improves business intelligence.

Fabric offers high performance for processing large volumes of data in real time, and simplified data ingestion capabilities. Just as anyone can easily create reports with Power BI, every Fabric user can create unified data acquisition pipelines, build machine learning models and scale solutions.

"Fabric is built on the simplicity that Power BI brought to the market. They expanded that into data engineering. And Fabric can truly become a data hub for your organization, hiding the complexity of what is there in your data estate from those who need to consume and use the data," says 3Cloud's Steve Hughes. "This is allowing for much bigger and broader space to work in. The ability to connect the databases and use change data capture to keep changes up to date without building any ETL tools, that's phenomenal."

Advantage: Improved Technology and Simplified Pricing

"You don't have to research which products to use, for instance should I use Event Hubs or IoT Hub or Apache Kafka or Databricks. You can do all of that in Fabric," says Bob Rubocki, Director – Solutions Architecture - Data & AI at 3Cloud.

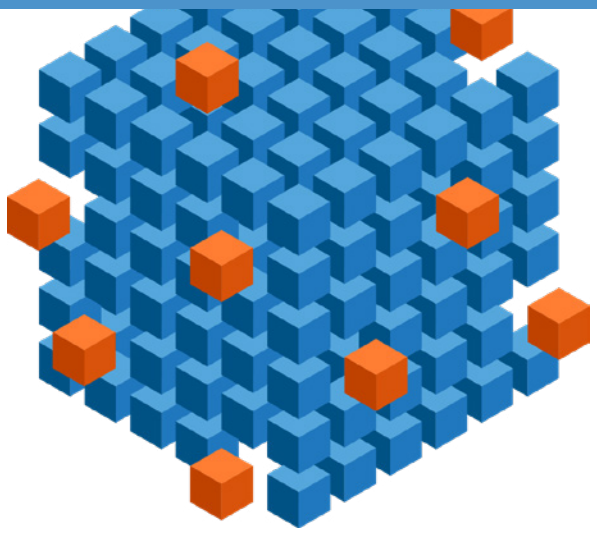
Fabric's robust set of included features and tools eliminate the need for organizations to otherwise purchase or manage separate products and licenses. Organizations are assured they're using the latest, most up-to-date versions of users' tried-and-true tools such as Power BI. Fabric also helps the business gain a handle on managing and controlling costs associated with data storage, processing and analytics.

Pay-as-you-go Fabric Capacity offers a shared pool of capacity that powers all Fabric capabilities, from data modeling and warehousing to BI and AI experiences. Fabric Capacity's simplified pricing allows organizations to purchase a single pool of compute for every workload, and the ability to use the same set of Capacity Units wherever there's a need, without having to pre-allocate capacity. Transparent monitoring through a centralized dashboard allows teams to monitor usage and costs.

3Cloud can help you prepare and upskill team members in modern concepts and the new data paradigm. We offer expert, targeted solutions, training and embedded communities of excellence — supported by the governance and stewardship necessary to secure and monitor your data — ultimately helping you cultivate a data-first culture and grow your organization's appetite for data-driven insights and innovation. Contact us today to get started.

EMPOWER EVERY DATA-FOCUSED TEAM

Any modern organization should understand how a modern data platform can drive their analytics and insights, and all that powerful, real-time insights enable teams to achieve.



"Ten years ago, that was SQL Server," says 3Cloud's Eric Wozniak. "Today it's Microsoft Fabric. At organizations where a lot of the modern data infrastructure is already in place, the product fades into the background, and those organizations can focus instead on how we can build something together and make it work."

Fabric can help organizations view or leverage as much or as little data as they need in order to glean impactful insights.

"Where I see Fabric having a lot of success is in what I call 'departmental implementations,'" says David Tyler, Senior Director of Data, Analytics and AI at 3Cloud. "Especially within larger enterprise organizations, business lines tend to act almost like their own operating companies, if you will. They have their own way of doing things, they have their own structures, they have their own rules. And where Fabric is extremely powerful is that it allows them to have that compartmentalized perspective, but still be a part of the enterprise. They're still leveraging a proper solution from an enterprise perspective, but they're able to focus and home in on a departmental goal or a departmental need and satisfy that need in the context of the enterprise. Fabric is great at that. It's a departmental enabler. I can go into the finance department or the sales department or the operations or supply chain, and I can implement Fabric and customize it in four different ways, but it's still Fabric."

Case Study: Software Developer Opens Opportunities for Growth

Confluent, a leading developer and software technology company specializing in products and solutions that provide real-time data streaming and processing for its customers, worked with 3Cloud to deploy Microsoft Fabric as a way to amplify its Confluent Cloud offering on Azure. 3Cloud's experts helped Confluent seamlessly weave its core product suite with Fabric, enhance its Azure-based offerings, streamline data flows, overcome usage hurdles and unlock valuable avenues for growth.

Challenge

Platforms and technology behind Confluent solutions complicated to use and prone to misconfiguration

Solution

Simplify complex processes through a connector-style integration and provide low-code/no-code solution for integrated key products from Confluent Cloud to Fabric

Results

Confluent Cloud's capabilities expanded within Azure and Confluent can fully productize its solution to satisfy future customers' demands

Healthcare, Transformed

Highly regulated and tasked with securing and protecting massive amounts of highly sensitive data, healthcare organizations have much to gain — as do their patients — from all that's possible through Microsoft Fabric.

Challenge	Solution	Results
No comprehensive source for aggregated data	OneLake aggregates all data into a single source of truth	Data-informed decision making reshapes care and insights
Ensure care teams have secure access to all the data they need	Empower team collaboration through democratized data insights	Improved patient experience thanks to accessible, holistic view of patient data across healthcare professionals and care teams
Delayed or slower time to insight	Analyze massive amounts of data, faster, using built-in security and governance policies	Secure, real-time clinical and operational insights delivered using Event Hub, IoT Hub, Kafka and more

"We were working with one large healthcare provider with aggressive acquisition and organic growth goals, who wanted to grow the size of their organization by 20%. They needed good visibility into an integration from a data perspective to ensure they could manage all of their newly acquired, disparate entities well," Wozniak says. "From a technical perspective, they needed to invest in a platform that would enable that visibility, and provide that analytics engine, to allow them to gain faster insights about their organization. That's really what we call a modern data platform. The best way to do that is with Microsoft Fabric."

Retail Delivers Greater Value to Customers

As brick-and-mortar retail continues to grapple with the disruption of online offerings, supply chain visibility and rapidly shifting customer expectations, nearly every retail solution today relies heavily on meaningful, real-time data. Fabric helps retailers integrate data directly wherever it's needed within the business, and leverage data from multiple sources, instantly, to gain a deeper understanding of audience needs and curate personalized offerings.

Challenge	Solution	Results
Siloed, incomplete data with complex architecture	Unify data from numerous sources such as purchase orders, inventory and manufacturing, all in OneLake	Inform merchandising and supply chain strategy with real-time analysis and analytics
Using data to personalize customer experiences	Gain a 360-degree view of all customers by collecting and analyzing site, digital and smart store behavior	Develop content, copy and products tailored to customers' specific tastes or interests
Meeting local data regulations in every area the retailer conducts business	Leverage built-in security and governance to better protect collected customer data	Gain peace of mind, knowing in-store and ecommerce transaction data is secure

"If I want my sales department to connect over to operations, and into supply chain to see where my orders are and how long it's going to take to deliver this particular product to my customer, I don't have to go build a data mart and pull, and then build pipelines from all of those source systems into that system," Tyler says. "Retailers can leverage data as they are, where they are, how they are.

"Where governance really comes into play is, when I talk about a customer from a supply chain perspective, and from a sales perspective, there are always two different perspectives. We can align those perspectives into a single view — incorporate those capabilities from a data governance and data management perspective — effectively and efficiently with Purview, without having to invest in a huge, massive initiative or system," Tyler says.

Meeting Constituent Needs in Education and the Public Sector

Higher education and many government agencies often work with scattered, unstructured data. Data often cannot be accessed digitally and is not easily digestible. With Fabric, agencies and higher ed institutions can collect and store data in a single location, and in the cloud. Both sectors can leverage machine learning and AI to identify risks or trends, leverage data to drive improvements and meet constituent or student expectations, stream data from IoT sensors or other operational machinery to be ingested in OneLake with IoT Hub for real-time analysis and reporting. For the public sector, the opportunities Fabric provides seem limitless.

Challenge	Solution	Results
Abundance of data and technology siloes	Collect data in OneLake to provide one unified source of truth	Enable decision-making backed by trusted, secure data
Slow time to informed decision-making and risk responses	Analyze all different types of data in real-time, using built-in security and governance policies	Drive accurate insights with speed, while strengthening risk detection and prevention

Fabric Offers More for Data-Intensive Work

Lines of business-specific and industry- or sector-specific use cases for Microsoft Fabric will continue to evolve as its capabilities are refined and further developed. Roles or functions that will see immediate benefits from all that Fabric offers include data engineers, data scientists, data storytelling and wireframing, data warehousing, data stewardship (governance and security) and data-reliant business units such as supply chain teams. No matter the industry those functions are a part of, Fabric's seamless, clear workflows will improve collaboration across data-focused teams and super-charge data-first culture.

DATA ENGINEERING

Data engineers, responsible for data flows from the source to the data store, build and configure platforms to make use of organizational data at scale. While they typically work in Python to build data flow, Fabric's low-code interfaces like Data Flows and Data Pipelines ease data engineering workloads.

Data Factory, Synapse Data Warehouse, Synapse Data Engineering and Synapse Real-Time Analytics are each available within Fabric to advance and empower data engineering and visually integrate data from every connected source.

DATA SCIENCE

Data scientists model, map and transform data with Synapse Data Science and readily write AI-enhanced code with Copilot. Machine learning experimentation can be stood up handily.

DATA WAREHOUSING

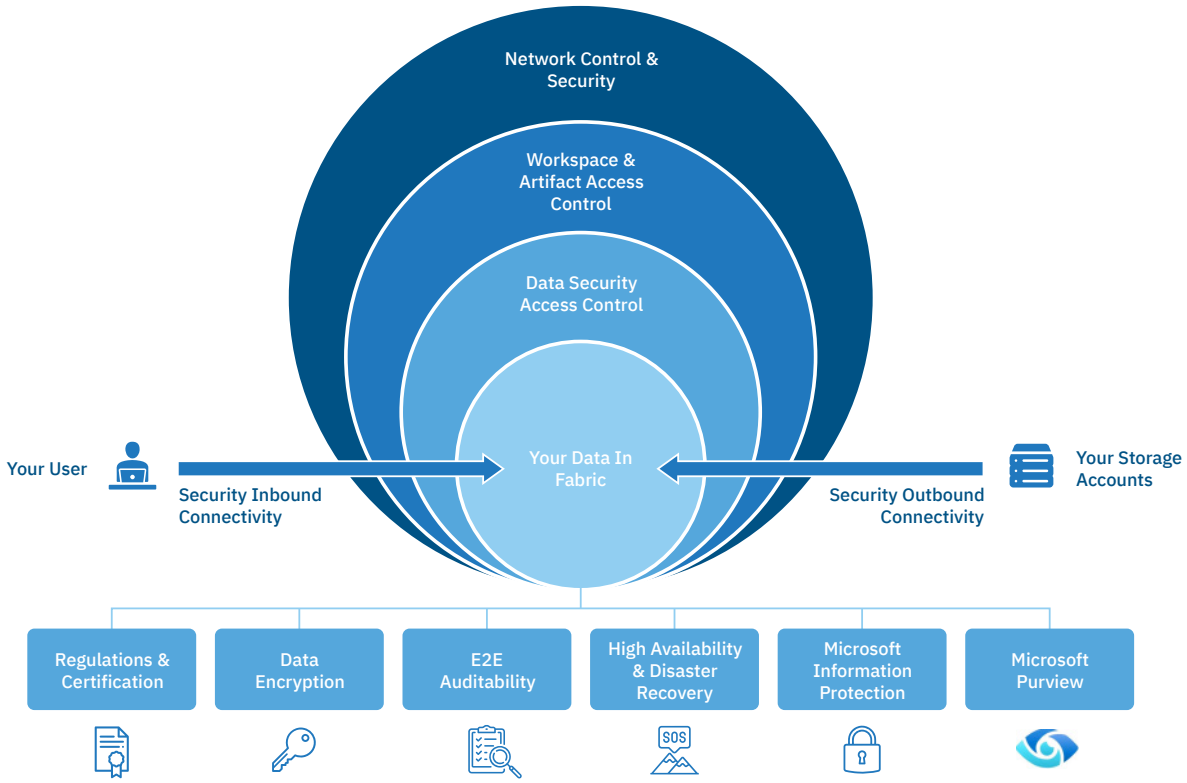
Fabric enables teams to connect data sources and deliver a single data foundation — OneLake — consistently, across all workloads and ensures intelligence flows where people work.

DATA STORYTELLING AND WIREFRAMING

On the analytics engineering side, Power BI enables teams to transform data to insight, visualize key insights and ensure end users can effectively understand and leverage organizational data to improve and transform the business or achieve departmental objectives. Fabric allows these teams to bring together more datasets and enable deeper, faster insights through Synapse Data Warehouse, Power BI and Data Activator.

DATA STEWARDS

Auditing, classifying and securing data becomes an easier task not only thanks to Purview, but also Fabric's data encryption and Microsoft Information Protection. Security and access layers allow administrators to readily define and control access, and Fabric's workspaces further isolate users from data that should not be available to them. Fabric enables IT and cybersecurity teams to provide high availability and more deftly manage disaster recovery and data loss prevention.



A smart way to experiment and learn about Fabric's capabilities first-hand is through a proof of concept (POC), which can be confined to a departmental scenario, for instance, within the marketing, sales, operations or HR functions, before scaling out organization-wide. 3Cloud's experts can help ensure your team's time is not wasted, while delivering maximum value. Contact us to talk through your team's challenges, and uncover potential POCs or scenarios that offer ripe opportunities to prove Fabric's value to your entire organization.

IN CONCLUSION ...

As business and industry shift away from traditional, on-premises solutions towards cloud-based alternatives, new possibilities for business intelligence continue to grow. Cloud-based business intelligence offers organizations access to data analysis from anywhere at any time, with unmatched freedom, scalability and cost-effectiveness. Microsoft Fabric takes that ease-of-use even further, combining SaaS convenience with AI-enhanced capabilities that can uncover hidden patterns, improve decision-making and much more.

3Cloud's experts can help you not only determine how to integrate AI to transform your business, but also understand how tools like Fabric will transform how your organization leverages data to innovate and differentiate against your competitors. Contact us to get started.

Microsoft Partner

Microsoft

3Cloud is your one accountable partner to deliver Azure infrastructure, data and analytics, and applications with the fastest time to value from our experience, tools and accelerators. 3Cloud is the largest pure-play Azure partner in the ecosystem with unequaled expertise in Azure. We have hundreds of Azure experts, including MVPs and Fast Track Solution Architects, with thousands of hours implementing cutting edge solutions with Microsoft's most advanced technology.

Microsoft US PARTNER OF THE YEAR 2023

sales@3cloudsolutions.com // 888-88-AZURE // 3cloudsolutions.com