Building a Data-Driven Organization in an Al World

How to Leverage **Microsoft Fabric** to mature your data analytics capabilities

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Presenters





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THE INTERLINK ADVANTAGE



We simplify your organization's interaction with Microsoft



We ensure the success of your project

MITIGATE RISK

We build security and compliance into every project

CREATE BUSINESS VALUE

We drive business value from your technology investments

MICROSOFT EXPERTISE

We have extensive expertise in Microsoft technologies

www.interlink.com

Agenda

- Building a Data-Driven Organization
- Why Choose Microsoft Fabric?
- Maturing Your Data Ecosystem with Fabric
- Data Security and Governance
- Getting Started
- Q&A



BUILDING A DATA-DRIVEN ORGANIZATION





of organizations believe Al will give them a **competitive edge**

Source: MIT Sloan Management Review



But AI is only as good as the data it's trained on



MIT, Becoming an AI-driven enterprise, September 2022 HBR, Why Every Modern Enterprise Organization Needs Insight-Driven Marketing, June 2023 PWC, 2024 AI Business Predictions, 2023





Customers enhancing their data estate face immense complexity

INFRASTRUCTURE	ANALYTICS	MACHINE LEARNING & ARTIFICIAL INTELLIGENCE	APPLICATIONS - ENTERPRISE
	Instantial Statistics Search Instantial Statistics Se		SALES MARKETING SCHOOL
Constant	SUBMER Phones Source		APPLICATIONS - HORIZONTAL
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DATA SOURCES & API:	DATA & AI CONSULTING		
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p) Blog post: mattturck.com/MAD2023

23 Interactive version: MAD.firstmarkcap.com

Comments? Email MAD2023@firstmarkcap.com FIRST

om FIRSTMARK



Today's challenges creating a data-driven culture



Siloed systems and data



Processing diverse types of data at scale



Poor quality of data



Minimal access to no- and low-code tools



Managing varying levels of data literacy and adoption



Integrating Data is Clearly Still a Problem



<u>"Transforming data into business value through analytics and AI," HBR, 2023</u> <u>"Unlock greater value with a data-driven operating model," Accenture, August 2022</u> TIME

75%

of leaders say a data-driven culture is very or extremely important to their organization's overall success

Only 32%

of companies realized tangible value from data with their current tools



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WHY CHOOSE MICROSOFT FABRIC?









Fabric and Microsoft 365: Enable every business user





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Why Choose Microsoft Fabric?

1. Integrate Microsoft data assets without heavy engineering

- 2. Integrate assets from on-premise networks and other clouds
- **3.** Transition from IaaS (Azure) to a SaaS



1. Integrate Microsoft Data Assets Without Heavy Engineering





2. Integrate Assets from On-Prem Networks and Other Clouds



3. Transition from IaaS (Azure) to a SaaS

OneLake – the OneDrive for Data - A single, unified, logical lake for your whole organization

MATURING YOUR DATA ECOSYSTEM WITH FABRIC

Data Ecosystem: 6 Phases of Maturity

Value

Access, Visualize and Securely Share Your Data

Find and connect data

Access all your data in Fabric and transform your data into a competitive advantage

Analyze data

Build actionable enterprise analytics in Fabric with the organization's data to generate real-time insights

Share insights easily

Create and embed Power Bl reports in Fabric, protected by industry-leading security that keeps all Fabric data secure

Enable All Data Professionals to Unify Data on a Single Foundation

1. Connect Fabric to a Critical Asset

Leverage Data Mirroring

- Near real time incremental replication inserts/updates/deletes between systems
- Multiple database technologies supported
- Multi-cloud support

© Time to Insights: 2-5 days vs. 2-4 weeks

2. Expand the Data Footprint

- Start with easier connections to Office365 and SharePoint
- Identify the more difficult connections to systems that will require SOAP, REST API, and other interfaces
- Build Lakehouse schemas of the new datasets
- Update governance rules to allow insights to be built

Solution State State

3. Connect Streaming Assets

- Native connections to event hubs with spark connectors
 - Confluent Kafka, Amazon Kinesis, Google Pub/Sub
- Delta formats maintain ACID transactions and partitioning
- An Eventhouse is created

○ Time to Insights: 3-4 weeks per stream vs. 1-2 months

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4. Build a Full Data Model

- Transform the datasets into a star schema (dimensions and facts)
 - Maintain data integrity and trust!
- Output from this work is a detailed data catalog
- Data Lineage is provided by Fabric

5. Enable Self-Service Analytics

- This is more of a governance than technology step Security Review
 - Employees can start requesting access to the Gold Layer and Semantic Models
- Communication is key
 - Demonstrations
 - How-to Guides
 - Data catalog access
 - Best practices to using the dataset
 - Best building dashboards and reports

S Time to Insights: 2-14 days

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YOUR DATA CLOUD IS REALIZED!

But You're Not Done Yet.

6. Manage Your Data as a Product

Data Analytics Flywheel

Manage your data so insights never become stale

What's Next?

- Data Science workspace
 - Large Language Models (LLMs)
 - Generative AI
- DataOps
- Compliance and Security labeling
- Master Data Management (MDM)
- Data Observability and Data Reliability

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Microsoft Fabric and Azure Al Portfolio

DATA SECURITY & GOVERNANCE

Interlink – M365 Data Security Maturity Model

Build the data taxonomy

- Master list of content types, locations, owners, and permissions
- Link the data security conversation to knowledge management

	A	В	С	D	E	F	
1	Category .	Document Type	Location	Link to Content	Notes	Business Owner	Classification
2	Accounting	Who to go to	OneNote - Solutions Resource Notebook - Accounting Process Tab	OneNote for Accounting -Solutions Resource		Sheree	Interlink - Interna
3	Accounting	Interlink Signed W9	SharePoint - Corporate - Accounting	Interlink W9		Sheree	Interlink - Interna
4	Accounting	Expensify - Expense Submittal App	Web app	Expensify		Sheree	Interlink - Interna
		Expense Level Approvals - Who to go to for					
0	Accounting	purchase approvals	SharePoint - Corporate - Company Policies	Employee Expense Report Policy.pdf		Sheree	Interlink - Internal
6	Accounting	ACH Form for Clients	Solutions Resource -Accounting	ACH Info		Sheree	Interlink - Interna
-		Write off Policy - Who to go to for approval					
	Accounting	le ve is	Interlink Docs - Corporate-Accounting/Admin- Accounting	Write Off Policy			Interlink - Interna
8	Compliance	Ingoing and Outgoing Wire Policy	Internal Compliance	Incoming-Outgoing Wires		Sheree	Interlink - Interna
				https://ppp.cmp.tchoot.com/choots/05.cm/DC/00/20//520.co/Had4/014			
9				nitcps://app.smarcsneec.com/sneecs/advpxPGJ9gxgvP3kvCvHgrwaw			
	Compliance	Employee Offboarding	Smartsheet	bjci-pwiiga8vjetiview-8iig	Insurance Q4b	Ralynn	Interlink - Internal
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10				nceManagement/Eerseuv1MXRBpUO0EaTzL6ABHy-ilamyQidPCA6VK			
	Compliance	Telephone Consumer Protection Act & Spam	Internal Compliance	BhTkQ?e=blAcly		Marilyn/Chase	Interlink - Interna
				https://interlinkcloudadvisors.sharepoint.com//b:/r/sites/archive-20			
11				22-09-28T143710Z/Shared%20Documents/Corporate_1/Company%			
				20Policies/DSR%20TO%20DO%20Checklist%20LH.pdf?csf=1&web=1			
	Compliance	Data Subject Request Checklist	Interlink Documents > Corporate_1 > Company Policies	&e=uKOe8j		Chuck	Interlink - Internal
10				https://interlinkcloudadvisors.sharepoint.com/account/Forms/Allite			
12	Customer	Customer Scope Proposals	Customer Folder in Intralink (Sales > Executed Docs > SOW)	ms.aspx		Marilyn	Interlink - Internal
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13	Customer	Customer Quote Proposals	Customer Folder in Intralink (Sales > Executed Docs > Product Order)	ms.aspx		Marilyn	Interlink - Internal
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14	Customer	Signed Customer Agreements	Customer Folder in Intralink (Sales > Executed Docs > Legal	ms.aspx		Marilyn	Interlink - Internal
10							
10	Customer	Subcontractor Agreement Template	Interlink Documents > Partner Documents > Subcontractor- Partnership Agreements	Interlink - Subcontractor Agreement - updated 2-10-22.docx		Marilyn	Interlink - Interna
16			Interlink Documents > Partner Documents > Subcontractor- Partnership Agreements				
10	Customer	Signed Subcontractor/Partnership Addendums	(either Subcontractor Employees or Subcontractor Vendors)	Connect Point - Subcontractor- Partnership Agreements - All Docume		Matt	Interlink - Internal
17	Customer	Time and Materials Policy	1. aaa-New Client Documents > Legal Documents	http://www.interlink.com/t&mpolicy	Updated 5/15/23	Marilyn	Interlink - Interna
18	Customer	Customer Deliverables	Deliverables folder under customer folder in SharePoint			Wilson	Public
10							
19	Customer	Customer Specific Technical Documentation	Customer Documents in IT Glue			Joseph Lindquist	Interlink/Custome
				https://interlinkcloudadvisors.sharepoint.com/:x:/s/solutionresource			
20				s/EX6lcfbk8xFCl488hJMmi50BGBd0m7bCm5t8fv9qK0-KpA?e=zhz6Q			
	Customer	Non-Standard PSAs	Solution Resources > Insurance	Q		Marilyn	Interlink - Internal
21	Customer	Support Contact Information	Solution Resources > Managed Services	Interlink Managed Service Contact Info.pdf		Joseph Lindquist	Interlink - Internal
22	Customer	QBR schedule	Managed Clients > QBR	MSP Client QBR & Audit Schedules and TAM Assignment.xlsx		Joseph Lindquist	Interlink - Internal
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Create the policies before implementing the technology

- Align the business on goals of data protection
- Defines roles and responsibilities

Confidential Information:

Confidential information includes sensitive personal, company, and client information and must be given the highest level of protection against unauthorized access, modification, or destruction. Confidential Information can be any information not generally known to the public or recognized as standard industry practice, including, without limiting the generality of the foregoing, any data; reports; studies; interpretations; forecasts; know-how; compositions; plans; strategies; strategic partnerships; employee information; client information; financial records; intellectual property; trade secrets; research; ideas; concepts; designs; formulas; technology; devices; inventions; methods or processes, whether or not patented or patentable; the substance of agreements with clients, suppliers and any third party; client lists; supplier lists; marketing arrangements; fee policies and records, and such other information customarily understood to be confidential or otherwise designated as such in writing.

Personal Information:

Unauthorized access to personal Confidential information may result in a significant invasion of privacy or expose the company's members to substantial financial risk. Confidential information includes information protected under privacy laws, information concerning employees' pay and benefits, and personal identification or medical/health information about employees.

Lead with Adoption and Change Management

- Allay fears of business disruption engage the stakeholders early
- Limit risk by gradually rolling out features and functionality
- Interlink's Employee Experience practice manager has a PhD in Organization Development
- All Interlink project managers are Prosci certified

Create a strategy for ongoing management

- Align responsibilities of data owner with IT
- Interlink offers M365 Managed Data Security

Regular Tasks

- App review/monitoring/sanctioning in Defender for Cloud Apps
- Monitor and troubleshoot label application and SIT
- Fine-tuning of labeling and DLP policies
- Annual reviews of sensitive info types
- Executive reporting

As-Needed Tasks

- Configuration changes based on updated business needs
- Content search and E-Discovery requests
- Respond and remediate DLP, MDCA and IRM alerts

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GETTING STARTED

Special Offers

Fabric Starter Assessment

- Review your data footprint
- Determine architecture and security model to fit your needs
- ~\$5k

Fabric Jumpstart

- Connect one asset to Fabric
 - On-premise or cloud database
 - 5-20 tables
 - Daily data ingestion
 - Basic validations
- ~\$10-12k (based on complexity of the data source)

*There might be Microsoft funding available

QUESTIONS & ANSWERS

Q. If I'm already using Azure services, what does the transition to Fabric look like?

For existing data clouds

- Review Data Factory costs and discern if a migration is needed
- Keep gathering data in data lakes as the source for new Lakehouses
- Dedicated SQL Pools:
 - Microsoft offers a migration runbook to follow

For applications/other services

- Azure databases natively connect, so it's easier to get started
- Database mirroring is quicker to establish with Azure services
- Your developers will be familiar with the development workspaces

Q. How much does Fabric cost?

Fabric Compute Pricing

SKU	Capacity unit (CU)	Pay-as-you-go	Reservation
F2	2	\$262.80/month	\$156.334 /month ~41% savings
F4	4	\$525.60/month	\$312.667 /month ~41% savings
F8	8	\$1,051.20 /month	\$625.334 /month ~41% savings
F16	16	\$2,102.40/month	\$1,250.667 /month ~41% savings
F32	32	\$4,204.80/month	\$2,501.334 /month ~41% savings
F64	64	\$8,409.60/month	\$5,002.667 /month ~41% savings

OneLake Data Storage

Storage	Price
OneLake storage/month**	\$0.023 per GB
OneLake BCDR storage/month	\$0.0414 per GB
OneLake cache/month*	\$0.246 per GB

Q. How much does Fabric cost?

Pricing is based on 2 factors:

- Provisioned compute
- OneLake Data Storage

Notes:

- Pricing follows the Power BI capacity for sizing
- Fabric capacity provides more functionality under 1 price (more bang for the buck) such as Pipelines and Mirroring - without additional cost
- Fabric capacity includes all of the Power BI capacity functionality
- Ability to start small and grow with your organization

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How does Fabric help with AI?

Fabric is all about getting your data found

Data scientists love datalakes!

Fabric helps with metadata

So an LLM can get an underlying understanding of your data

Fabric brings your data into the same place, even if it's co-located or virtualized

 So your AI has access to all your data without having to connect to multiple different systems

OTHER QUESTIONS?

THANK YOU

