

Using People Productivity Analytics to Power Business Decisions Microsoft 365 & Azure Synapse





Digital transformation enables new ways of working, impacting productivity, engagement and culture

New business models, such as hybrid, change collaboration and how work gets done



Continued investments in collaboration tools enable new business models



Digital transformation drives organizational, productivity and culture



Data-driven approach to measure impact, identify opportunities





Data-driven people-centric decision making and insight generation remain key obstacles



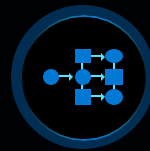
Productivity, engagement and culture impact of digital transformation are difficult to measure



Adoption rates for newly implemented collaboration tools often stay lower than expected



Despite new business models such as hybrid, employee engagement remains low, burn out high



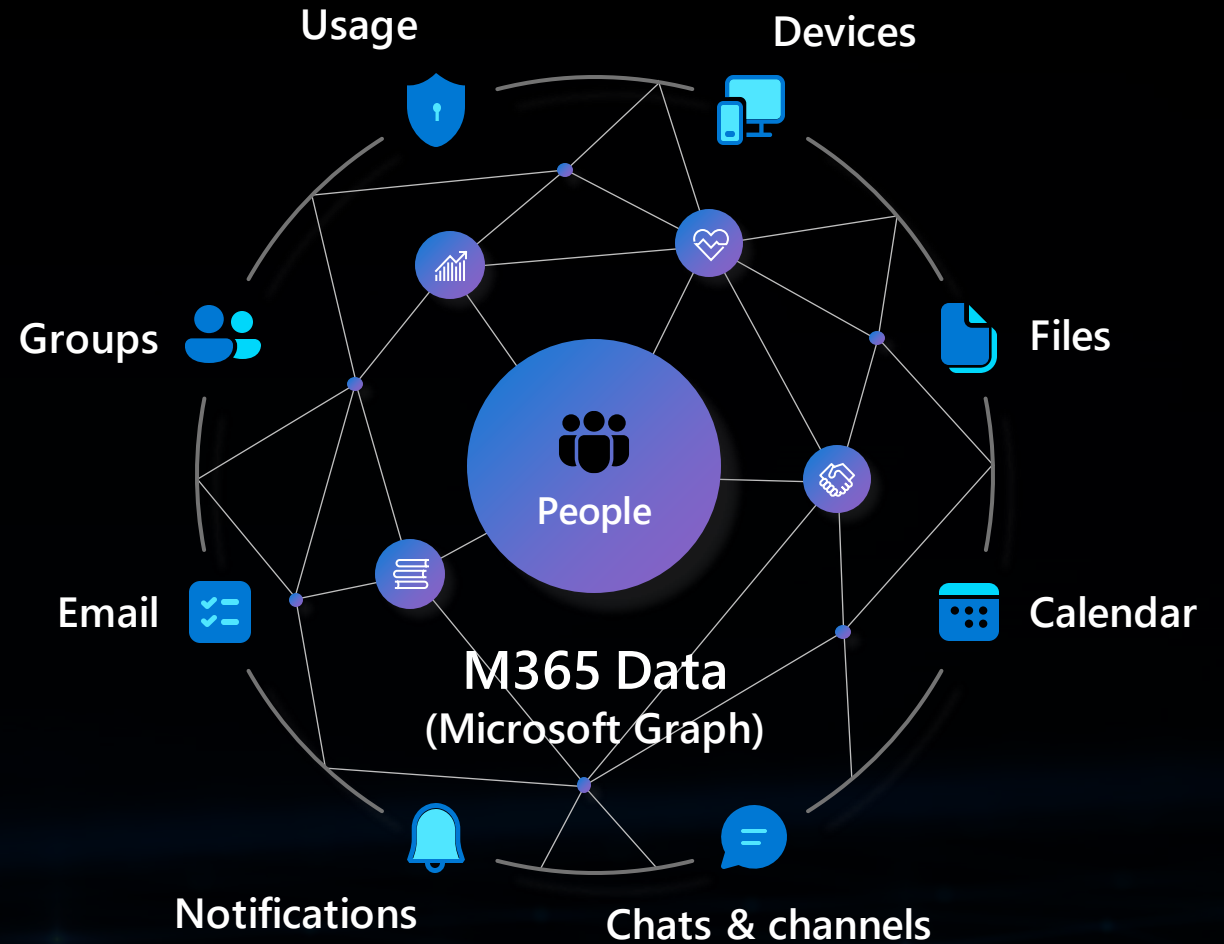
Data estates to support decision making and insight generation remain fragmented



Collaboration and employee experience data – while native to each enterprise – is often underutilized



Discover the patterns of collaboration and engagement to drive digital, culture, and process transformation





Improve visibility of
employee
engagement,
collaboration and
communication



Scale and optimize personalization of
employee engagement

Democratize intelligence and insight
across the workforce

Improve employee productivity, efficiency,
and effectiveness

Free up personnel and resources to work
on higher-value activities



People Productivity Analytics Use Cases



Culture Driven Digital Transformation

Leverage Productivity Score and usage data to drive and measure impactful Digital Transformation initiatives



Employee Engagement and Productivity

Extend Viva Insights collaboration metrics into your Azure environment and augment employee engagement insights with deeper analytics



Hybrid Work Effectiveness

Enable hybrid work models and effectively balance people, technology and workplace requirements between in-person and remote



Organizational Network Analysis

Harness information flows and team connectivity to unlock productivity, innovation, employee engagement and organizational change



People Productivity Analytics – How it works

Understand how employee activities power innovation, facilitate organizational efficiency, streamline processes, and enable your business

-  Outlook
-  SharePoint
-  Teams
-  Azure Active Directory
-  Viva Insights
-  Office 365



Representational model for People Productivity Analytics



1

Connect M365 data to Azure Synapse



2

Continuously **collect** and store collaboration data in Azure. **Combine** with other relevant data sources



3

Analyze data to detect relationships between online collaboration and employee actions

4

Build **predictive** machine learning algorithms. Deploy in the cloud or the edge

5

Build dashboards to flag potential opportunities for improved collaboration and engagement

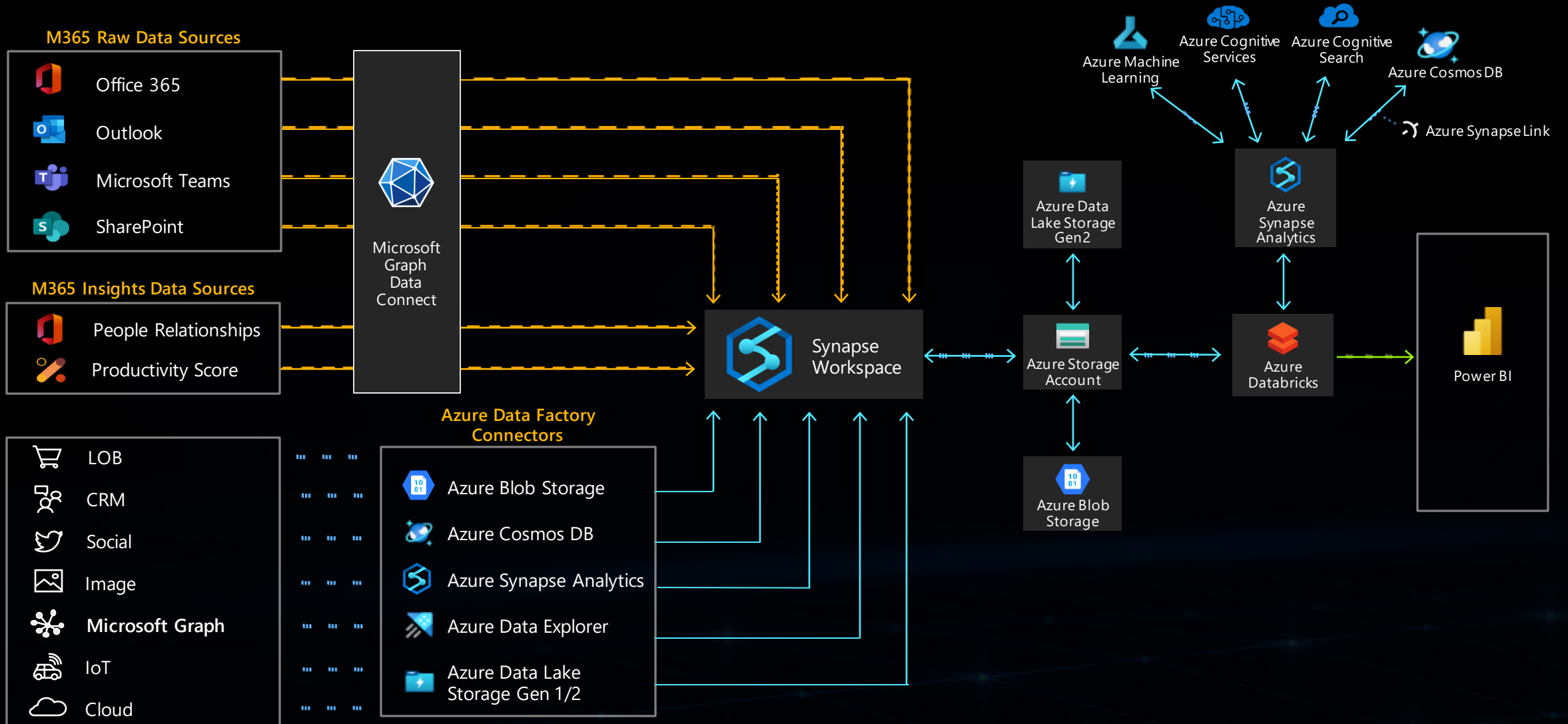


6

Connect it to your management and HR applications to proactively address

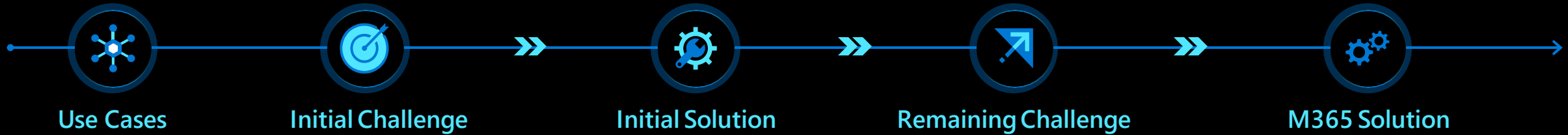


M365 Analytics Architecture

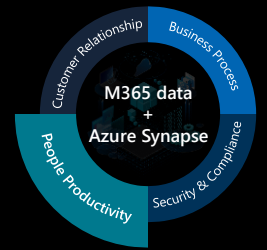




Extend Existing People Productivity Insights



Use Cases	Initial Challenge	Initial Solution	Remaining Challenge	M365 Solution
Culture Driven Digital Transformation	Convoluted, manual operations stifle productivity and collaboration resulting in inefficient processes	Digital transformation through best of breed technology and process automation increase agility, productivity, and engagement	Lack of tool adoption and best practice dissemination. Inability to measure behavioral changes and identify a path to a more agile, productive organization	Use M365 data to assess adoption, measure tool usage, identify best practices, boost collaboration culture, and drive organizational change. Ability to monitor tool ROI efficiently
Employee Engagement and Productivity	No insights into team productivity, collaboration, and culture. Desire to assess how work gets done, drive employee wellbeing, and retention	Traditional HR systems include goals, sentiment score, and employee life cycle	Data-driven approach to people productivity remains elusive. Desire to combine collaboration data in larger data estates for advanced insights	Use collaboration data from Viva and collaboration tool usage to generate insights and model retention, promotion, and employee satisfaction
Hybrid Work Effectiveness	Global disruption forces new work models (remote and hybrid) at massive scale. Tools that support new work models that are not yet in place	Investment in collaboration tools so teams can stay engaged and productive in a remote and hybrid work environment	Hybrid is the new normal. Inability to measure engagement, productivity, and wellbeing remain. Employees continue to feel isolated	Use M365 data to assess hybrid model effectiveness, leverage for real estate footprint, and drive innovative employee engagement processes and tools
Organizational Network Analysis	Find the sources of outdated, manual operations in organizations. Desire to increase agility by identifying information flows and key connectors	Consultative engagements and survey driven Organizational Network Analyses approaches drive organizational insights	ONA engagements are often intrusive, point-in-time, and lack accuracy. Proliferation of ONA in organizational agility initiatives require scalable solutions	Passive ONA approaches leverages M365 data for increased accuracy and ease of use. Ability to flexibly integrate into people productivity, agility, and transformation approaches



Culture Driven Digital Transformation

Leverage Productivity Score and Usage data to drive and measure impactful Digital Transformation initiatives

Today's Challenges



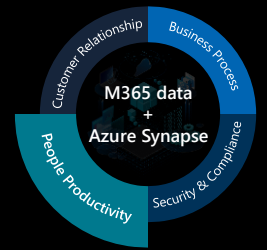
Many new tool adopted but with unclear impact on collaboration, productivity, agility, and culture



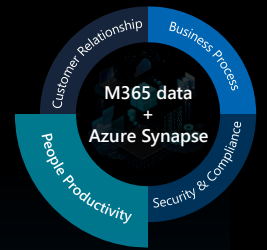
Failure to uncover opportunities for tool rationalization: Usage and performance



Inability to justify spend/ROI. Customers are reducing cost by consolidating technology



Culture Driven Digital Transformation Overview



Measure effectiveness and goal achievement to support digital transformation and tool investment



Assess opportunities to drive further culture change through digital transformation and collaboration tools



Rationalize tool usage and access to drive impact, rationalize tool footprint and costs



Transform the employee experience through predictive modeling, engagement, and wellbeing outcomes

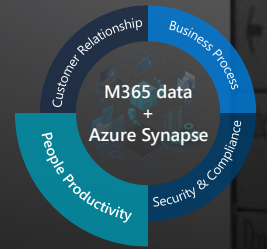


BENEFITS

- Rationalize impact of digital transformation and license/tool spent
- Measure impact of digital transformation on agility, collaboration and engagement
- Increase employee productivity and engagement

Use Case: Culture Driven Digital Transformation

American healthcare conglomerate accelerates leadership development initiatives with MGDC collaboration insights



BUSINESS CHALLENGE

- To cultivate and retain top executives amid a global talent war, the customer sought to develop a leadership excellence program grounded in the differentiating characteristics of its most effective leaders
- The company lacked access to objective collaboration data that would provide insight into the behavioral patterns of high performing executives

SOLUTION

- Customer selected Microsoft Graph Data Connect to gather and analyze collaboration data from Microsoft Outlook and Microsoft Teams chat and calls
- Data analysts investigated impact of executives' communication with teams, and activity focus on objective leadership performance measures
- Predictive models to assess retention risk, promotion potential

RESULT

- Findings from data will inform development of leadership coaching and development programs
- Tangential discoveries within collaboration dataset will also support executive succession planning strategies
- Solution rollout ongoing (early FY22)

SOLUTION ELEMENTS



Microsoft
Graph Data
Connect

Microsoft 365



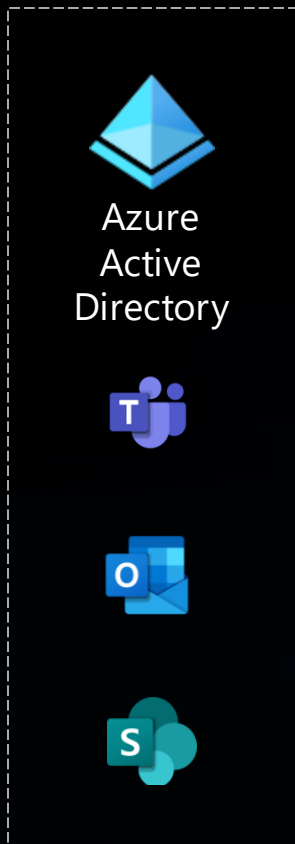
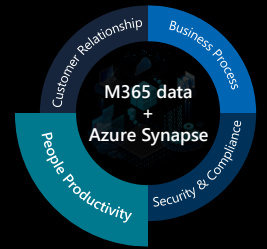
HR Data
Finance Data



Azure
Synapse

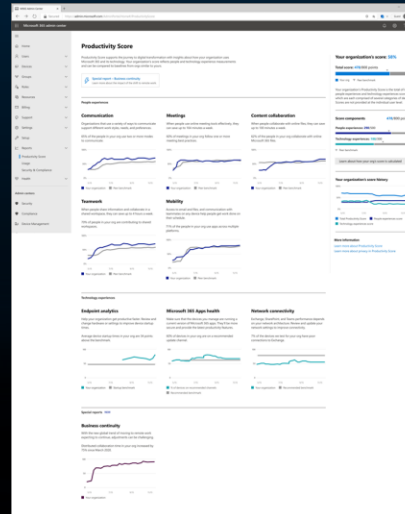
Intelligent data sets to measure impact and improvement opportunity of Digital Transformation

Complement “raw” collaboration data with insights into digital work adoption and impact on productivity, engagement and collaboration



Productivity Score provides insights about how your organization digitally transforms

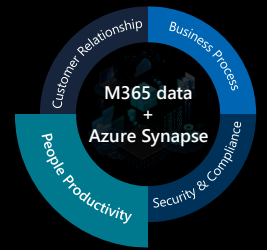
- Metrics to measure M365 transformation
- Opportunities to improve productivity
- Status of best-practice achievement



M365 Usage data helps measure M365 to uncover improvement areas

- Outlook, Teams, SharePoint, M365 Licenses
- Granularity on user level
- License cost, transformation opportunities





Employee Engagement and Productivity

Extend Viva Insights collaboration metrics into your Azure environment and augment employee engagement insights with deeper analytics

Today's Challenges



Inability to combine data on collaboration from all sources



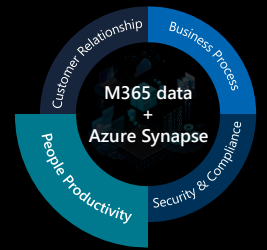
Cumbersome customization of insight generation to your needs



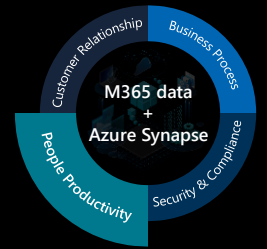
Lack of insights flexibility between cooked and raw data



Fragmented sources for collaboration, productivity and engagement data



Employee Engagement and Productivity Overview



Data extensibility –
Extend Viva Insights
metrics into your
Azure environment
and data lake



Insights extensibility –
Complement
collaboration insights
from Viva Insights with
other data sources from
M365 and beyond



**Measure the impact
of your digital
transformation
initiatives** on
collaboration culture,
engagement and
organizational agility



**Build predictive
models** on retention,
wellbeing, productivity
and agility

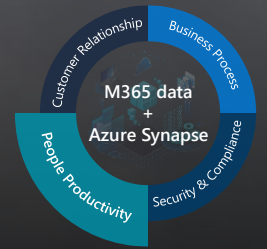


BENEFITS

- Holistic collaboration and productivity view
- Measuring digital, tool transformation through collab metrics
- Increase employee productivity and engagement

Case Study: Employee Engagement and Productivity

Global telecom giant exposes and eliminates wasteful, cyclical processes to enhance employee productivity and wellbeing



BUSINESS CHALLENGE

- Customer suffered from overwhelming volume of unnecessary authorization requests
- High volume of official 'spam' distracted from key priorities and undermined engagement and employee productivity
- Firm's data science team was charged with investigating origin of needless requests, but lacked sufficient data to determine root cause

SOLUTION

- Customer selected Microsoft Graph Data Connect together with Viva Insights metrics to gather and analyze previously inaccessible raw collaboration data from Microsoft Outlook and Teams
- Data science members diagnosed burdensome steps in the authorization process and introduced new prioritization methods to reduce process noise and increase process efficiency

RESULT

- Solution rollout ongoing
- Scaling to regional population to measure enhanced process efficiency and accelerated decision-making
 1. Improve hybrid experience using Teams activity and transcripts
 2. Optimize internal comms to coincide with maximum read/response rates

SOLUTION ELEMENTS



Microsoft
Graph Data
Connect

Microsoft 365



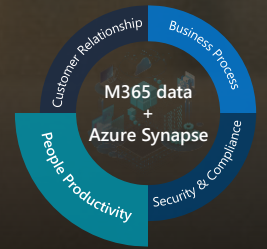
HR Data
Finance Data



Azure
Synapse

Case Study: Employee Engagement and Productivity

Azure Synapse and M365 data unlock collaboration patterns and enrich talent strategy



BUSINESS CHALLENGE

- To strengthen its industry leadership in LATAM, customer sought to enhance existing talent and operational strategies with collaboration data to assess cross geo collaboration and project investments
- Customer lacked inputs from existing analytics tools to support these investigations; momentum for the initiative stalled

SOLUTION

- Customer turned to Microsoft Graph Data Connect to complement Viva Insights to provide missing inputs to execute its objectives
- Collaboration data from key business units was extracted from Outlook email and calendar with MGDC, modeled in Azure Databricks, and surfaced in PowerBI dashboards for use by business decision makers


RESULT

- M365 informs the development of a novel Employee Productivity & Insights 360 program aimed at maturing the customer's talent strategy
- Additional insights into group connectivity and topic modeling help leadership break down silos, promote knowledge sharing, and improve visibility into business-critical processes

SOLUTION ELEMENTS



Microsoft
Graph Data
Connect



Microsoft 365

- Teams Data
- Email Data
- Meeting Data



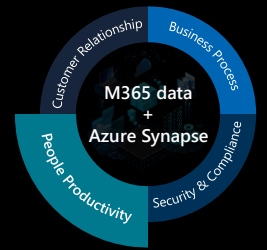
LOB Data



Azure
Synapse

Employee Engagement, Productivity Accelerator

Data Table Template – COMING SOON



- Data Flattening
- Data normalization
- Data cleansing, de-dub

- No-code, 1-click deployment in Azure
- Accelerated path to value – Queries, dashboards, visualization, deeper solutions

Meetings
MeetingId
ICalUid
Subject
IsRecurring
IsCancelled
StartTime
DurationMinutes
TotalAccept
TotalDecline
TotalNoResponse
TotalAttendees
TotalDoubleBooked
TotalEmailsDuringMeeting

MeetingParticipants
MeetingId
PersonHistoricalId
IsOrganizer
IsDoubleBooked
Response
LocalStartTime
DurationMinutesAdjusted
EmailsSentDuringMeeting

PersonHistorical
PersonHistoricalId
EmailAddress
StartDate
EndDate
PopulationType
IsInternal
ManagerId
HR Attribute 1
....
HR Attribute n
ExternalCollaboratorId

MailParticipants
MailId
PersonHistoricalId
IsSender
PersonTimeSpentInMinutes
LocalSentTime

Mails
MailId
ConversationId
Subject
SentTime
SenderTimeSpentInMinutes
NumberOfRecipients

CallParticipants
CallRecordId
PersonHistoricalId
IsOrganizer
LocalStartTime
LocalEndTime

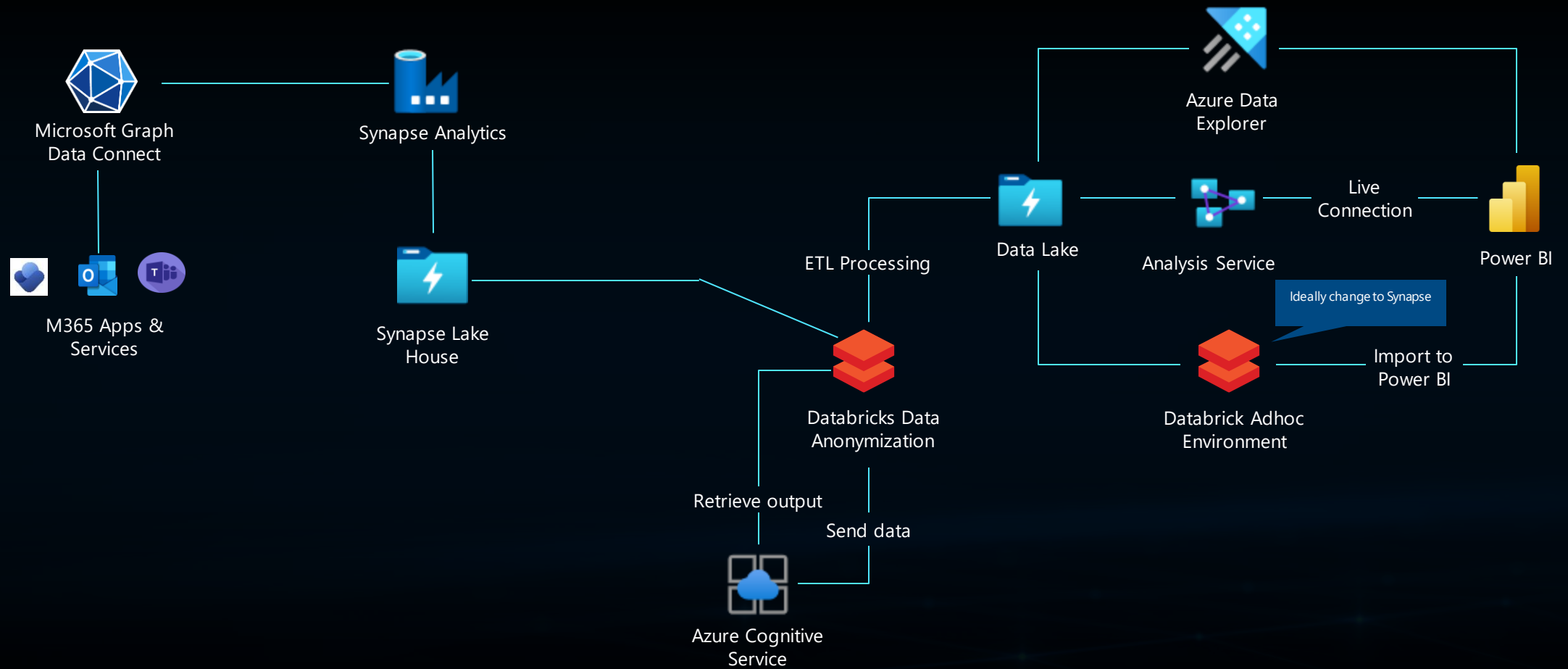
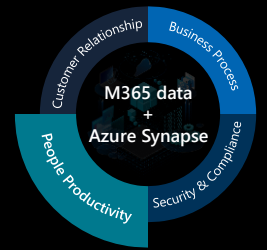
Team Chat Participants
InstantMessageId
PersonHistoricalId
IsAfterHours
IsSender
LocalSentTime
SenderTimeSpentInMinutes

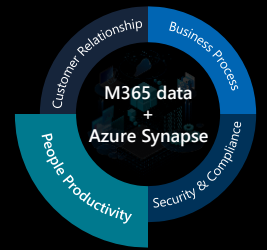
Team Chat
InstantMessageId
AppName
SentTime
InteractionType
TotalParticipants

Calls
CallRecordId
MeetingId
AppName
IsScheduledCall
TotalParticipants
Interaction Type

Employee Engagement, Productivity Accelerator

Data Table Template Architecture – COMING SOON





Organizational Network Analysis

Harness information flows and team connectivity to unlock productivity, innovation, employee engagement and organizational change

Today's Challenges



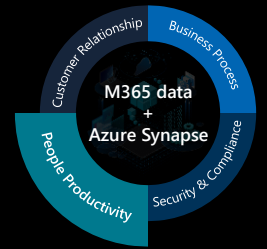
Inability to recognize knowledge gaps, disconnects, disengagement within a growing organization



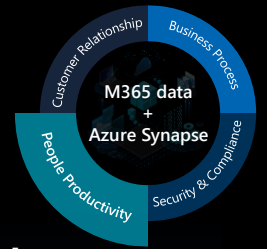
Identify and provide relief to overtaxed resources such as knowledge brokers or influencers within the organization



Lack of insight into effectiveness of reorganizations, onboarding, training, and cross pillar collaboration (long term effects)



Organizational Network Analysis Solution



Extend Viva Insights collaboration metrics to detect patterns of communication and information flows and blockers



Leverage ONA metrics to find opportunities to enhance connectivity, agility between internal and external teams



Gain insights into key productivity use cases, including innovation, agility, isolated and over stressed teams, inclusiveness or effectiveness of organizational change



Assess the effectiveness of organizational, culture and digital transformations and discover blind spots

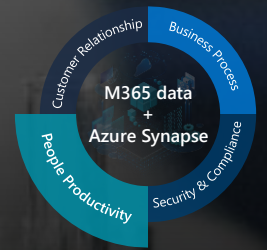


BENEFITS

- Increase ROI: Measure the impact organizational shifts
- Improved Organizational Efficiency: Create new process
- Predict Business Outcomes: Analyze trends

Case Study: Organizational Network Analysis

Multi-national chemical company with over \$40B in revenue providing a baseline and measurement framework to increase inclusiveness



BUSINESS CHALLENGE

- Leading chemical company with exemplary Diversity and Inclusion programs
- Desire to measure program impact, further discover inclusiveness “blind spots”
- Proactively identify opportunities and potential attrition risks
- Provide a fact-base, passive mechanism for leadership visibility

SOLUTION

- Engaged with MGDC partner Axiom and their InclusivX solution
 - Leverage existing M365 collaboration data
 - Apply network science and AI engine
 - Deliver target analytics to enhance employee experience
- Deliver relevant dashboards assessing accessibility, balance, community and connectedness

RESULT

- Ability to passively measure impact of D&I initiatives
- Access to a leading-edge analytics platform and the opportunity to help shape its future direction
- Fact-base to craft workable inclusion, team effectiveness and organization strategies



SOLUTION ELEMENTS



Microsoft Graph Data Connect



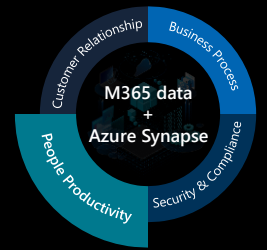
HR Data



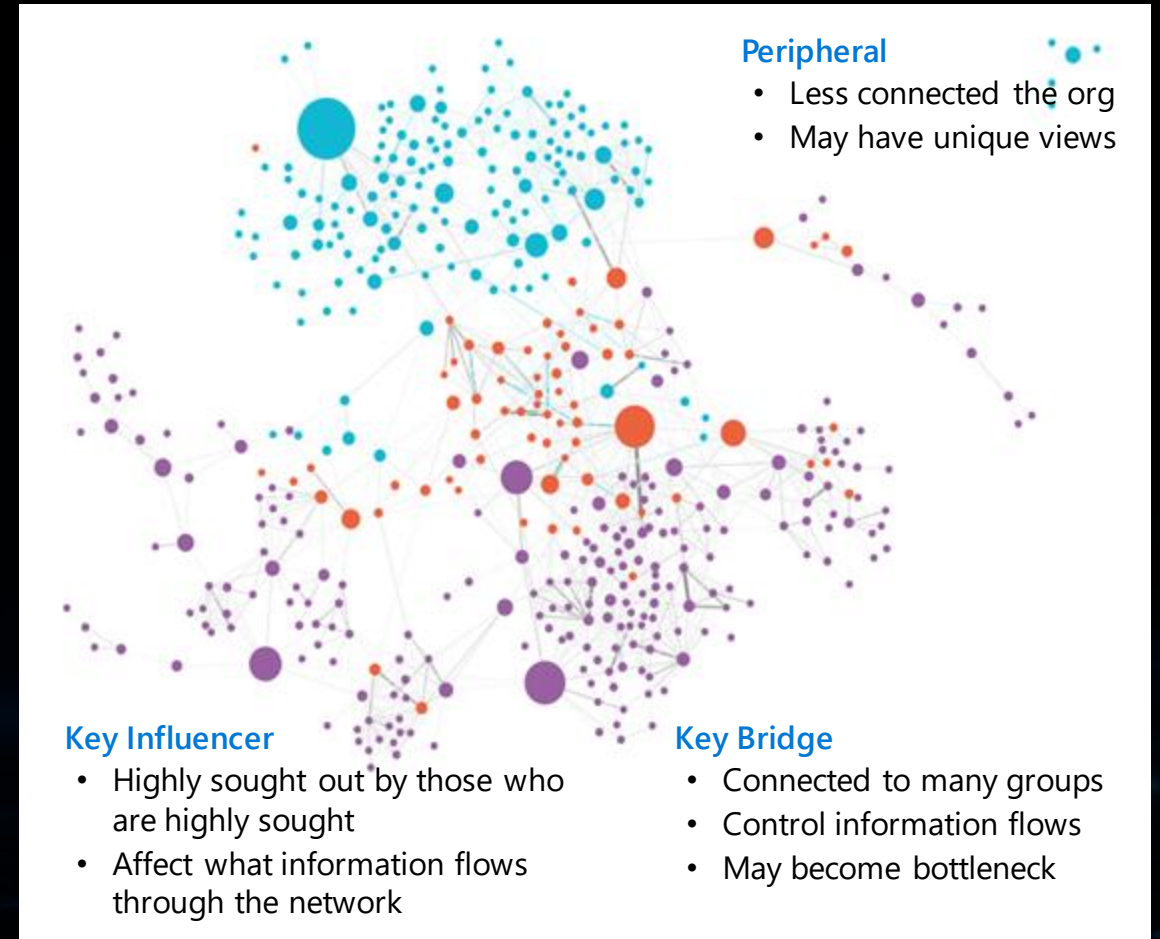
Partner Solution

Organizational Network Analysis Accelerator

ONA Template – COMING SOON for Viva Insights customers

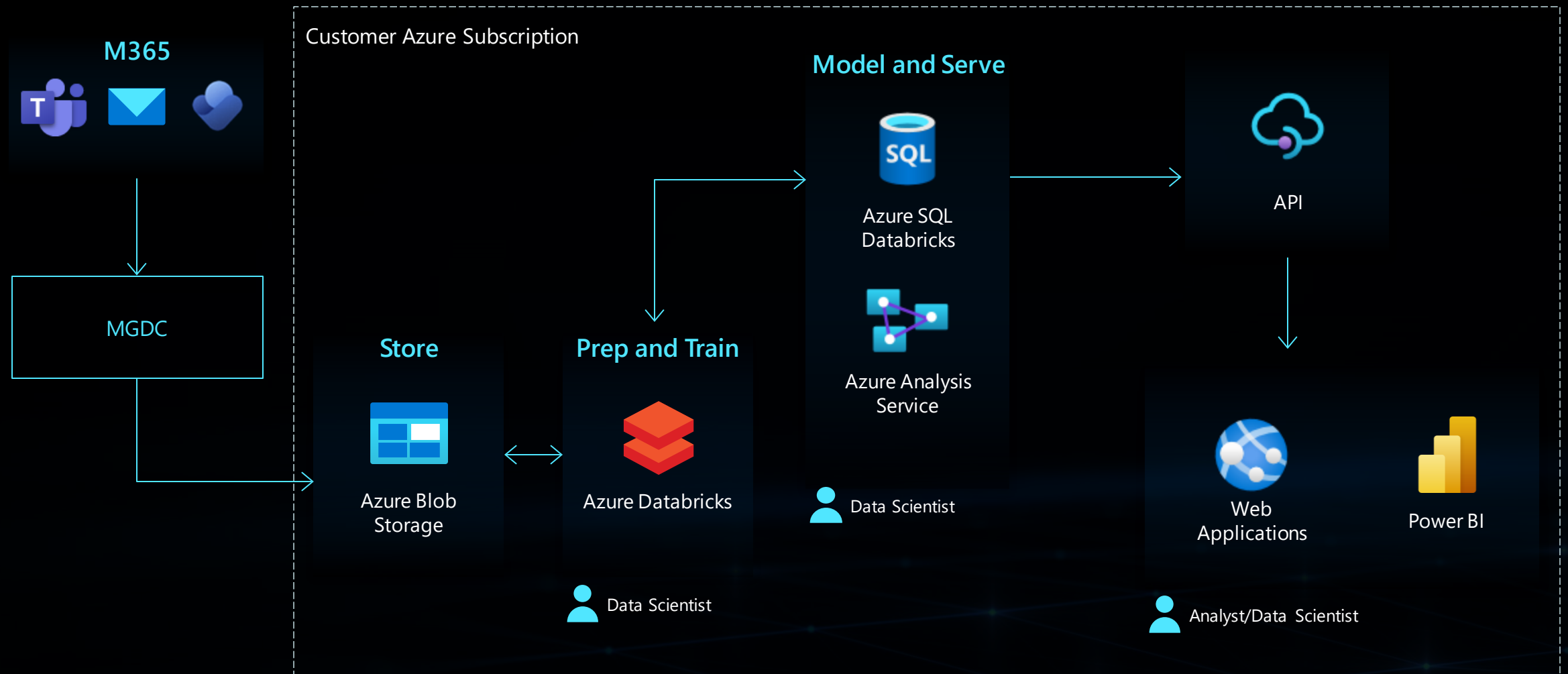
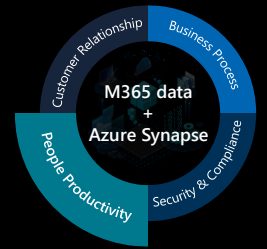


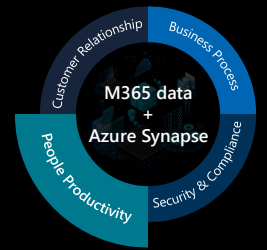
- Structured way to analyze how information flows
- Network connectivity key to many use cases
 - Team Productivity
 - Agility and Innovation
 - Employee Engagement
 - Leadership Communication
 - Inclusiveness
 - Measuring Impact of Organizational Change
- ONA Accelerator provides critical ONA metrics, based on M365 collaboration tools
- ONA Accelerator helps visualize connectivity
- Accelerator leverages Viva Insights metrics and other M365 collaboration data for “passive” ONA



Organizational Network Analysis Accelerator

ONA Template Architecture – Available soon





Hybrid Work Effectiveness

Enable hybrid work models and effectively balance people, technology and workplace requirements between in-person and remote

Today's Challenges



Significant effort in planning, implementing, testing, measuring the effectiveness of new designed workspaces



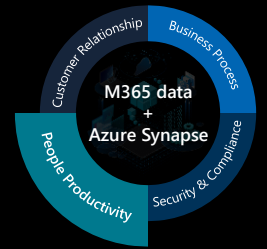
Coordinating online and in person resources



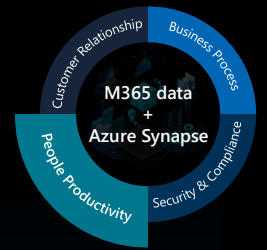
Managers are wedged between leadership and employee expectations. Employee churn/retention is a risk



Facilitating a safe and effective hybrid work environment



Hybrid Work Effectiveness Solution



Enable **seamless, effective collaboration** across the org with custom hybrid work



Gauge **employee sentiment** to measure engagement and inclusion



Leverage **analytics and insights** to build and iterate custom hybrid work environments



Establish **policies** mitigate health and safety risk with minimal business disruption

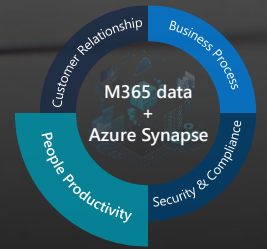


BENEFITS

- Reduce employee churn
- Grow an inclusive organization that exceeds employee expectations
- Optimize custom workplace setups to address constantly changing workforce needs

Case Study: Hybrid Work Effectiveness

Leading US pharmacy retail provider with over 200K employees Leveraging ML to provide employees with suggestions to enhance their hybrid work environment to maximize collaboration, productivity and engagement



BUSINESS CHALLENGE

- Pharmacy provider is moving to a new hybrid work model but encounters challenges in measuring engagement and productivity
- Desire to measure employee connectivity and avoid isolation
- Desire to provide a hybrid work planning system, suggesting best collaboration location – Virtual versus in-person

SOLUTION

- Leverage collaboration signals from Outlook and Teams collaboration
- Insights into how hybrid work happens and impact to employees
- Develop ML model for prediction models
- Built a “Location Planner” tool to allow employees select collaboration locations based on highest desired outcome

RESULT

- Insights into employee collaboration, network maps and early-warning for disengagement by location
- Optimizer solution to enable employees in hybrid collaboration – Virtual or in-person
- Extension of optimizer solution to help assess real estate footprint

SOLUTION ELEMENTS



Microsoft
Graph Data
Connect



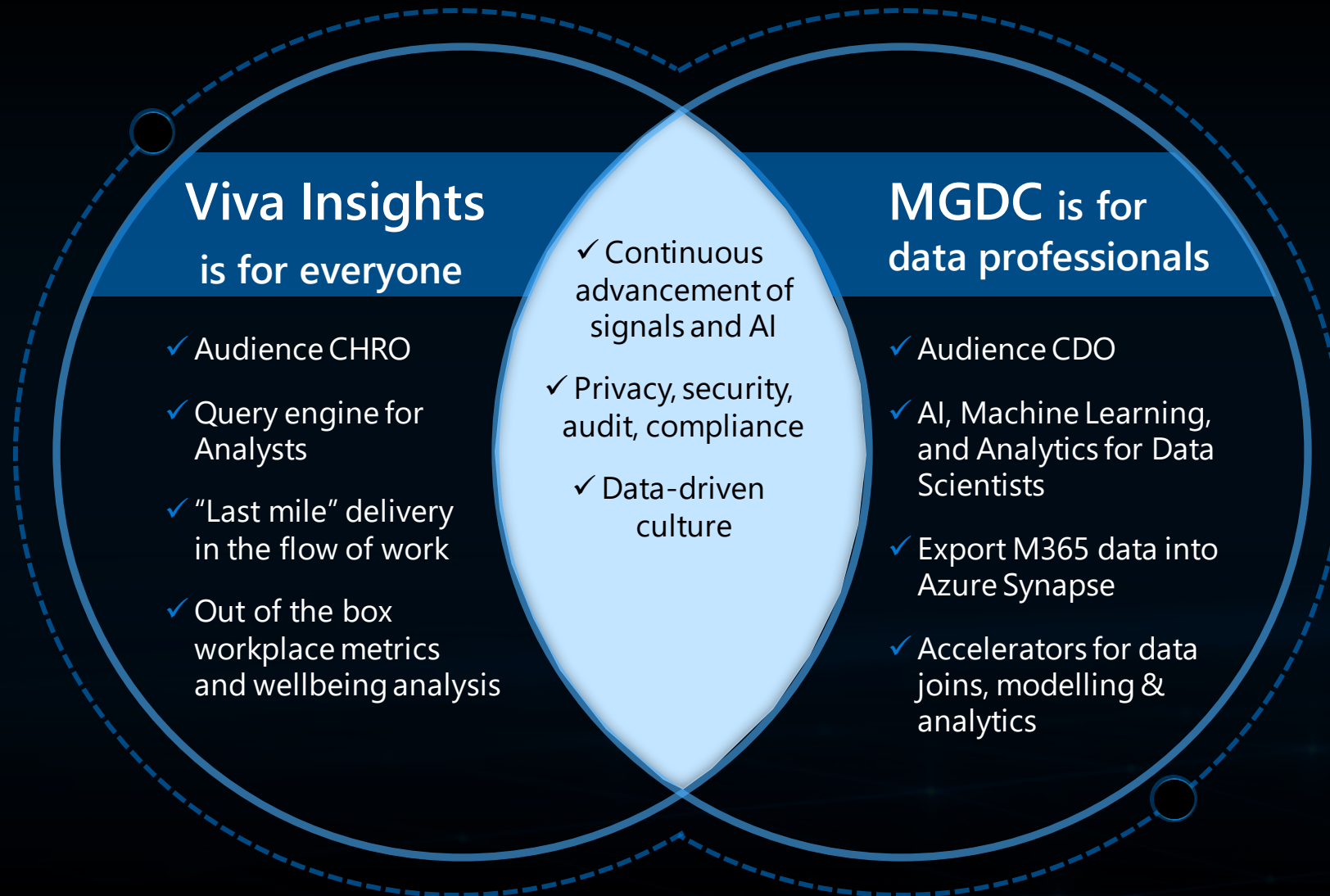
HR Data,
VPN
Webex, Slack



Azure
Synapse

Microsoft Graph Data Connect and Viva Insights are better together

Enabling Viva customers to get custom insights with Azure Synapse





Next steps ...

- Learn more about how to ingest M365 data in Azure Synapse ([Link](#))
- Align with your business stakeholders for sponsorship, expectations and budget
- Start with business case to develop scenario/use case and supporting solution design



...how Microsoft can help you

- Request MTC Data & AI Architecture Design Session or Rapid Prototype (optional)
- Work with your DAI CSA to do a pilot/ Solution Accelerator (optional)