Using Customer Relationship Analytics to Power Business Decisions

Microsoft 365 & Azure Synapse
Enterprises have adapted dynamically to the challenges posed over the recent years.

- Customer profiles exist in numerous systems (online, in person, phone, reseller, etc.).
- Customers engage in a myriad of ways (Email, Social, Chat, Phone).
- Actual customer buying patterns are varied and inconclusive.
- Collaboration on documents replaced joint working sessions.
Fast and dynamic and often decentral adoption impacted transparency and efficiency

- Fragmented customer response processes with gaps between documented and “as-is” processes
- Identifying the right owner/approver/expert
- Unclear decision processes and communication flows
- Lack of transparency between different departments
- Missed optimization and growth opportunities
Identifying collaboration and communication patterns are key to achieve real business agility.
Give your client facing roles the insights they need to delight their customers

- Eliminate client frustration with personalized online engagement
- Outflank your competition with coverage strategies based on predictive models
- Automate simple services & focus employees on high value customer needs
- Prevent costly redundant activities with cross-functional collaboration insights
Customer Relationship Analytics Use Cases

- **Relationship Mesh**: Integrate customer/seller relationship data from various systems together into a single view with actionable insights at the area & individual account level.

- **Customer 360**: Combine the power of Azure Synapse with Dynamics 365 Customer Insights and Microsoft 365 to build a comprehensive view of customers experience possible.

- **Customer Issues Management Solution**: Ingests customer complaints from email, chat, social media, intelligently classify, and surface to the correct support agent for quick resolution.

- **Customer Conversation Lineage**: Integrate Microsoft 365 email conversations with CRM or Ticketing information to create a single view with customer sentiment analysis.
Customer Relationship Analytics – How it works

Use M365 collaboration data to identify the most effective ways to engage customers, minimize redundant activities, and increase customer satisfaction.

1. Connect M365 data to Azure Synapse
2. Continuously collect & store sales related data in Azure. Combine with other relevant data sources (CRM data)
3. Analyze data to validate business processes, understand patterns of customer engagement, & determine effectiveness
4. Build predictive machine learning algorithms to anticipate future issues and opportunities. Deploy in the cloud or the edge
5. Build dashboards to offer real time views of employee collaboration & customer engagement + potential improvements
6. Connect it to your customer support and sales operations applications to proactively address...
# Extend Existing Customer Relationship Insights

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<th>Initial Solution</th>
<th>Remaining Challenge</th>
<th>M365 Solution</th>
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<td><strong>Relationship Mesh</strong></td>
<td>Inability to track, nurture, and improve customer relationships. Lack of visibility during sales cycle stages makes it impossible to provide sales guidance</td>
<td>CRM systems document conversations and emails via “self-reported” customer interactions</td>
<td>Sales leadership lack insights into depth of “actual” customer relationships: strength of relationship and customer sentiment</td>
<td>Pair M365 data and CRM system data to gain a complete view of your customer communications and provide effective sales guidance</td>
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<tr>
<td><strong>Customer 360</strong></td>
<td>Need to understand previous customer interactions and touchpoints to drive highly contextualized, effective conversations</td>
<td>CRM systems document your company’s customers interactions with as progress through the sales funnel</td>
<td>Still missing all the points communication with a customer. Track complete customer journey (event, trial, sale, implementation, active consumption)</td>
<td>Develop a 360 view of customer's journey to have effective conversations that recognize all the points of contact with your organization</td>
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<td><strong>Customer Issues Management Solution</strong></td>
<td>Inability to address increasing volume of complaints. Lack of a complaint queue leads to disorganization, redundancy, and a slowdown in the rate of responses</td>
<td>Customer support systems address customers complaints and basic product challenges</td>
<td>Complaints come through many disparate systems (email, chat, social) are not actively staffed and end up falling through the cracks leading customer aggravation</td>
<td>Aggregate customer complaints coming from multiple channels (email, chat, social) into a single system that can be addressed by customer support</td>
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<td><strong>Customer Conversation Lineage</strong></td>
<td>Need to share information across the organization at scale to create alignment and visibility for key topics (i.e., vision statement, product roadmap)</td>
<td>Use Outlook as an email client to send rules-based emails to select recipients for your email campaign</td>
<td>Unclear if internal email campaign are effective in disseminating information (read through rate). Need to track patterns of communication at scale</td>
<td>Leverage M365 data to figure out what works and craft highly engaging internal campaigns with measurable results. Learn how content is shared internally through the organization</td>
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</table>
Relationship Mesh

Integrate customer/seller relationship data from various systems together into a single view with actionable insights at the area & individual account level.
Today’s Challenges

Lack of insights into customer relationships: strength of relationship, frequency of communication, customer sentiment

Overburdened sellers managing large territories are unable to provide customized customer care due to lack of time and structured data management

Lack of visibility inhibits strategic account planning
Relationship Mesh Solution

Enable **efficient, automated pipelines** to bring Microsoft 365 and CRM data together in Azure

Define **ruleset** to calculate the connectivity score between internal and external contacts

Gain **timely analytics and insights** that help improve relationships between sellers with high priority accounts

Establish a detailed view of relationship event tracking and a checklist to make it actionable

**BENEFITS**

- Minimize customer churn, increase loyalty, and generate more revenue in every account
- Programmatically manage and improve customer interactions at each stage of the sales cycle
- Get visibility into your accounts and establish clear next steps
Case Study: Customer Relationship Mesh
Global Investment Firm Uses Azure Synapse and M365 Data to improve critical customer relationships

**BUSINESS CHALLENGE**
- Building strong relationships with customers is very important to improve customer retention, loyalty and revenue
- Insights about the strength of relationship with customers and their key contacts will enable the teams to take required actions to manage and improve the interactions at different stages in a customer engagement life cycle

**SOLUTION**
- Using MGDC they have built an impact score that calculates based on the type and recency of interactions to address and develop a more accurate sales pipeline
- This solution accelerator helps developers with all the resources needed to build a Relationship Mesh Solution that gives a summary view of all the key accounts and a detailed view of interactions at individual account level

**RESULT**
- With this new data leadership can clearly and accurately identify last engagement time with a customer or prospecting list
- Gained timely analytics and insights that help improve relationships between sellers and high priority accounts
- Establish a detailed view of relationship event tracking to make actionable progress

**SOLUTION ELEMENTS**
- Microsoft Graph Data Connect
- Microsoft 365
  - Sent emails
  - Attachments
  - Contacts
- External data & LOB apps
- Azure Synapse
Architecture Overview: Relationship Mesh

**Data Sources**
- Microsoft 365
  - Emails
  - Calendar Events
- Dynamics 365
  - Contacts
  - Accounts
  - Opportunities
  - Employees

**Load and Prepare**
1. Microsoft Graph Data Connect
2. Azure Storage (raw JSON files)
3. Azure Storage (processed data)
4. Synapse Pipeline
5. Synapse Pipeline
6. Lake Database (prepared data)
7. SQL Pool (Aggregated data)

**Analyze & Visualize**
- Power BI
Relationship Mesh Solution Accelerator

Prepackaged business logic: Calculates a connectivity score between your sellers and customer contacts based on CRM, email communication and meetings data.

Prebuilt Power BI dashboard to includes actionable insights both at organization level and at an individual account level.

Link
# Relationship Mesh Solution Accelerator

## How it works

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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</table>
| 1    | **Deploy the Solution Accelerator**  
  - Set up Azure Synapse Analytics  
  - Create Office 365 connections and pipeline  
  - Create Salesforce connection and pipeline |
| 2    | **Upload the sample data and configure the solution**  
  - Upload sample datasets (or connect to your Office 365 tenant and CRM systems)  
  - Create/upload notebooks for data processing  
  - Run data processing pipelines |
| 3    | **Create the Power BI dashboard for summary and detailed reporting**  
  - Update the connections in Power BI dashboard provided as part of SA  
  - Refresh all data in the dashboards |
| 4    | **Review the insights with stakeholders and adjust as needed**  
  - Identify the target audience and roles within the business team  
  - Review and add new slicers or charts  
  - Update the Connectivity Score formula as needed |
Customer 360

Combine the power of Azure Synapse with Dynamics 365 Customer Insights and Microsoft 365 to build a comprehensive view of the customers experience
Today’s Challenges

Managing customer data from multiple sources and lacking a unified Customer 360 view

Constantly increasing their number of interaction channels and touchpoints with customers

Out of date, inaccurate, and fragmented sales interaction data makes it impossible to coordinate with peers across the organization
Customer 360 Solution

Build a comprehensive customer view and provide the best customer experience possible

Identify and segment your high value and at-risk customers

Enable marketing to run effective campaigns and promotions on “warm” leads

Boost customer retention and satisfaction

BENEFITS

- Increase customer retention and satisfaction
- Share data and collaborate cross functionally
- Trust the data in your system and forecast with confidence
Case Study: Customer 360
Media Conglomerate Leverages Customer Interaction Data to develop new offers

**BUSINESS CHALLENGE**
- Customers engage with businesses numerous modalities (web, in person, app, phone, etc.)
- Inability to unify customer records
- Ability to develop new products/promos/features based on customer feedback was limited

**SOLUTION**
- This solution accelerator showcases the cross-solution integration of Azure Synapse Analytics, Graph Data Connect and Dynamics 365 Customer Insights
- Link to Solution Accelerator
- By combining the power of Azure Synapse Analytics with Dynamics 365 Customer Insights, we can build a comprehensive view of customers

**RESULT**
Improved customer insights include:
- Immediate customer feedback to quickly address CSAT
- Development of new promos/offers based on data from bot chats
- Improved customer engagement

E.g., Based on bot interactions, Marketing was able to capture, harness customer asks to develop new promos/offers to meet customer demand

**SOLUTION ELEMENTS**
- Microsoft Graph Data Connect
- Microsoft 365
  - Emails, Chats
  - Bots D365
- External data & LOB apps
- Azure Synapse
Architecture Overview: Customer 360

1. Ingest Source Data (Microsoft 365)
2. Store and Process Azure Synapse Analytics
   - Azure Data Lake Storage
3. Train and Serve Azure Machine Learning
4. User
5. Ingest Dynamics 365 Customer Insights
6. Pipeline Endpoint
7. Ingest Power BI
Customer 360 Solution Accelerator

Prepackaged business logic: Calculates customer activity and activity in a detailed timeline

Prebuilt Power BI dashboard to includes actionable insights both at organization level and at an individual account level

[Image of prepackaged business logic and prebuilt Power BI dashboard]
## Customer 360 Accelerator

### How it works

1. **Deploy the Solution Accelerator**
   - Set up Azure Synapse Analytics and Customer Insights
   - Create Office 365 connections and pipeline
   - Create Salesforce connection and pipeline

2. **Upload the sample data and configure the solution**
   - Upload datasets (or use the sample property management dataset provided as part of SA)
   - Unify customers and create Relationships, Activities, Segments and Intelligence
   - Create/upload notebooks for training a machine learning model and integrate the custom ML models into CI

3. **Create the Power BI dashboard for summary and detailed reporting**
   - Update the connections in Power BI dashboard provided as part of SA
   - Refresh all data in the dashboards

4. **Review the insights with stakeholders and adjust as needed**
   - Identify the target audience and roles within the business team
   - Review and add new slicers or charts
   - Update the Connectivity Score formula as needed
Customer Complaint Management

Consolidate customer complaints from email, chat, social media. Intelligently classify, and surface to the correct support agent for quick resolution.
Today’s Challenges

Complaints coming from different channels are often missed or lack context leading to delayed responses and customer frustration.

General support agents are critical to the business but are also valuable, overtaxed resources. Lack of compliant classification means inability to specialize leading to wasted time.

Lack of a complaint queue can lead to disorganization, redundancy, and a slowdown in the rate of responses.
Customer Complaint Mgt. Solution

- Build an end-to-end macro-ingestion customer complaint management solution
- Use AI to intelligently classify, sort, and tier/prioritize complaints
- Ingests complaints from multiple sources, both traditional and modern
- Compare and contrast current complaints to similar past complaints

BENEFITS
- Improved customer satisfaction and reduced response times
- Greater support agent efficiency
- Visibility into all your complaints in a single, unified platform
Case Study: Customer Complaint Mgt.

Restaurateur / Hospitality Chain uses MGDC + Azure Synapse + Power Platform to resolve real time customer feedback.

**BUSINESS CHALLENGE**

- It is becoming increasingly difficult with the way companies are increasing their number of interaction channels and touchpoints with customers
- More so, customer feedback occurs online, in social media, and other social platforms via customer reviews and likes
- How to proactively address the complaints and the volume in increasingly difficult

**SOLUTION**

- Azure Synapse Analytics can help bring all customer data, interactions data and complaints data into a unified data platform (Learn More)
  - AI powered text classification can help classify the complaints into the right category and route them to support team for faster resolution
  - Power App can help the support team access their complaint queue and respond quickly

**RESULT**

Customer complaints management improved:
- Lowered time to response
- Clear classification of escalations
- Overall improvement in Customer Satisfaction Score (CSAT)

**SOLUTION ELEMENTS**

- Microsoft Graph Data Connect
- Microsoft 365
  - Sent emails
  - Attachments
  - Contacts
- External data & LOB apps
- Azure Synapse
Architecture Overview: Customer Complaint Mgt.

Customer Complaints
- Microsoft 365
- External sources

Insert/Sort/Classify Complaints
- API Management Services
- Hosted ML Model

Raw Complaint Data
- Azure CogSearch

Indexed Complaints
- Power App

Power BI Dashboard

Train Model
- Azure Synapse Analytics
- Auto ML
Conversation Lineage

Integrate Microsoft 365 email conversations with CRM account information to create a single view with customer sentiment analysis.
Today’s Challenges

Unclear if internal email campaign are effective in disseminating information

Bad practices such as routinely overshar ing or late night/weekend communications

Unable to determine flow of communication and the parties involved to resolve issues
Conversation Lineage Solution

**Track emails from campaign (read through rate, click through rate)**

**Identify and root out negative behaviors by setting email rules that govern the patterns of communication**

**Determine the value each party is bring to the chain of interaction (reduce redirecting)**

**Measure changes in an organization's communication patterns**

**BENEFITS**
- Leverage the power of conversation patterns to optimize efficient routing
- Craft compelling internal email campaigns with proven results
- Identify and eliminate bad communication practices
Case Study: Conversation Lineage
European Bank Leverages M365 + Synapse to move from Digital Laggard to Digital Native

**BUSINESS CHALLENGE**
- The pandemic required the organization to change business processes and adopt new technologies
- Many departments required training but there was no effective way to measure progress on new processes
- As a result, morale was on the decline

**SOLUTION**
- Leveraging M365 MGDC, Azure the organization was able to effectively measure Teams usage including new features such as Whiteboarding, Meeting transcripts, Meeting effectiveness, employee/manager engagement and develop KPIs to measure change
- Link to Solution Accelerator

**RESULT**
- Quickly see progress of adopting new technologies by department
- Offer training courses
- Change organizational behavior

**SOLUTION ELEMENTS**
- Microsoft Graph Data Connect
- Microsoft 365
  - Emails, Teams, Calendar
  - Contacts
- External data & LOB apps
- Azure Synapse
Architecture Overview: Conversation Lineage

- People
- Microsoft Graph
- Chats & channels
- Files
- Events
- Security
- Devices

Azure Synapse
- Messages
- Chats
- Calendar
- Azure Cognitive Services Text Analytics
- Transformed Data
- Transformed Data

Note: Some pipelines are nested

Teams Tab
Published Power BI Report
Power BI

Click here
Architecture Overview: Conversation Lineage

Delete
Delete Old Emails
JSON Data

Copy data
M365 Emails To AZBS

Delete
Delete Old Emails Parquet Data

Web
Get Storage Account Key

Set variable
Set Storage Account Key

Notebook
Flatten Emails By ToCcBcc Recipients

Copy data
Copy Emails to Table

Copy data
Augment Flattened Emails

Copy data
Compute Recipient Email Domains

Copy data
Aggregate Augmented Emails
Visualization Overview: Conversation Lineage

Track if email are being read and shared. Use sentiment analysis to gauge reactions.
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)