



# Enterprise-Grade Governance

Managing the Power Platform at Scale (at Microsoft)



**Lianne Zelsman**  
Senior Product Manager



**Ryan McDonell**  
Service Engineer II

# Agenda

- Introduction
- Microsoft Tenant Analytics & Usage Scenarios
- Governance Strategy
  - Environment Architecture Strategy
  - Security Principles
  - Compliance Enforcement
  - Inventory & Telemetry
- Launch & Adoption
- Support & Services



# Who are we?

- We're Microsoft's first (and probably most annoying) customer – Microsoft Digital (MS IT)
- As admins we manage the following for Microsoft's tenant:
  - Governance & security strategy
  - Feature testing, enablement & adoption plans
  - User support
  - Custom tooling & solutions to further extend product capabilities

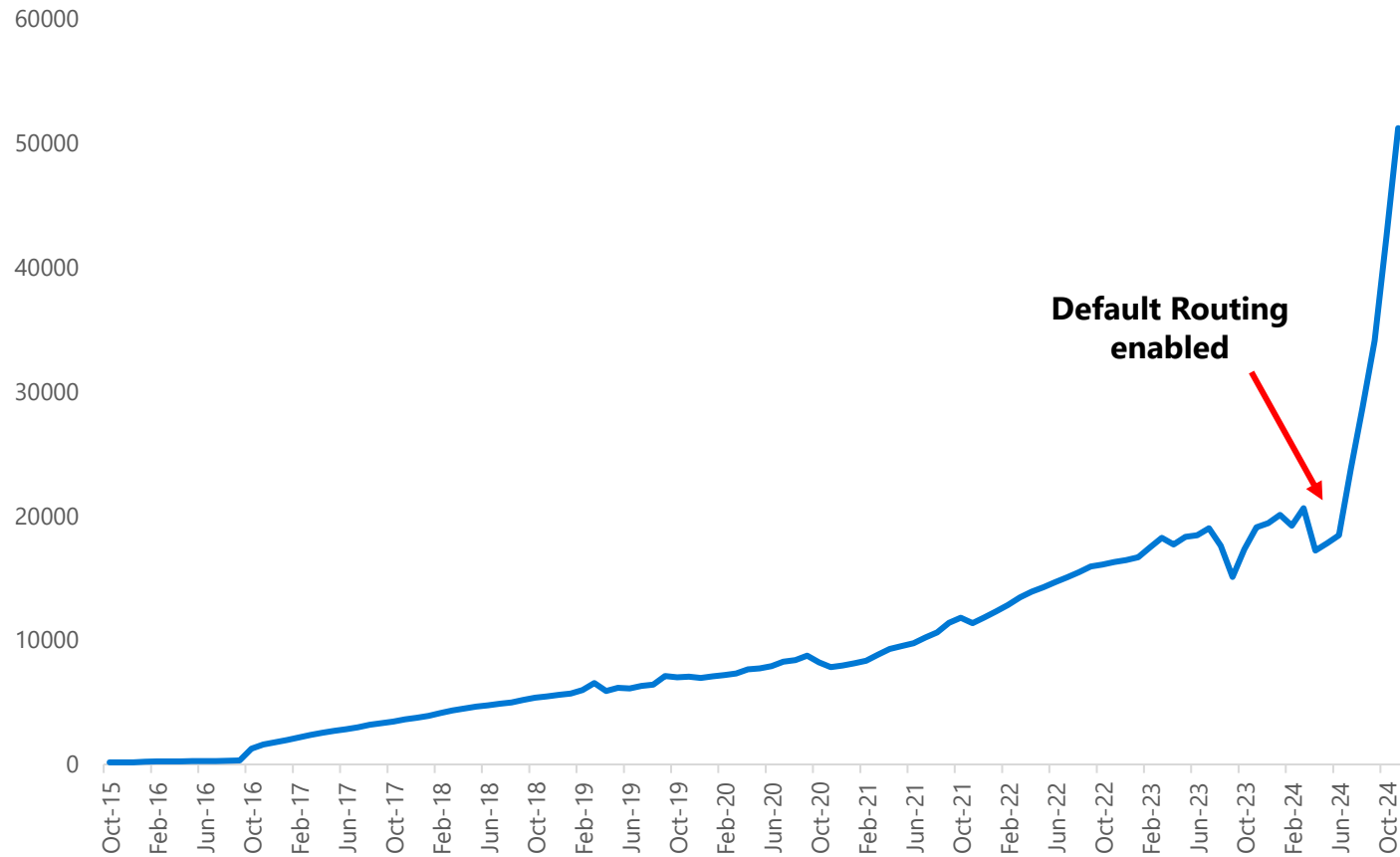
**Our goal:** empower everyone to achieve more with Power Platform...  
with guardrails



# Microsoft Tenant Analytics

# Tenant Size

## Environment Growth



## Current State



200K Apps



400K Flows



25K Agents

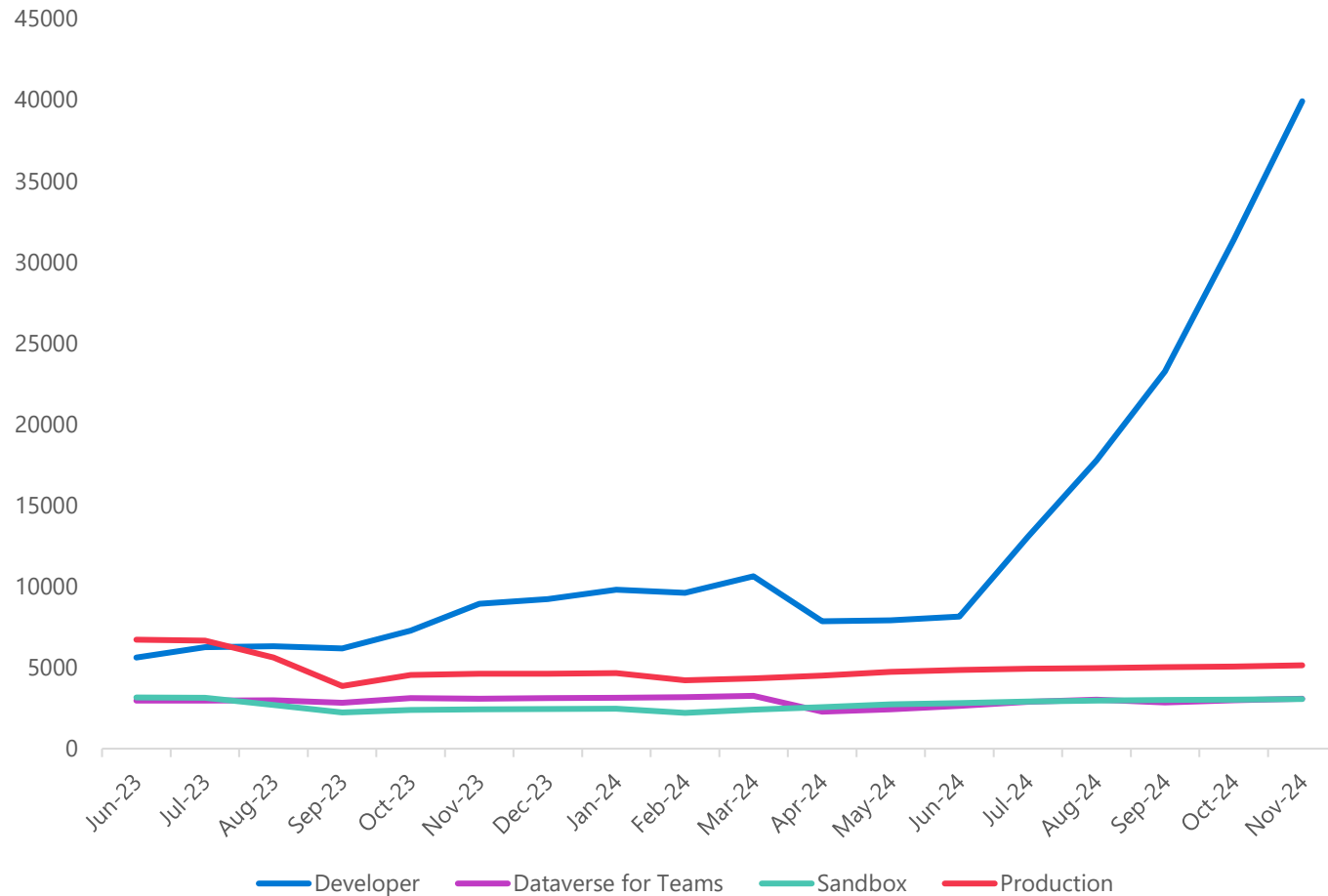


7K Pages

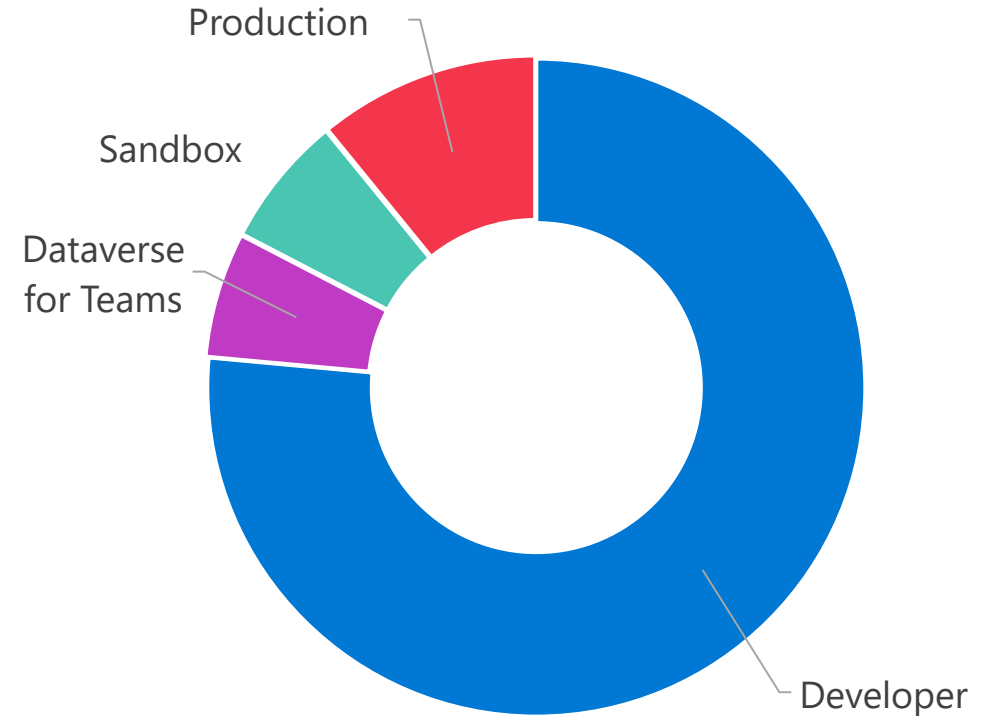
**53K Environments**

# Environment Breakdown

## Environment Growth by Type



## Current Breakdown



**53K**

Total Environments

# Maker Scenarios

---

- Power Platform usage spread out across all of Microsoft's divisions
- Mix of **citizen dev (non-technical)** and **pro-developed** solutions
- Popular use-cases internally:
  - Automating business workflows
  - Line of Business applications for teams with smaller development budgets or urgent timelines
  - Personal productivity solutions
- Recent AI integrations have caused rapid usage increase of bots/agents (copilot studio), especially in end-user support spaces

# Top Internal Power Platform Solutions

---

Our list of “top” apps (highest MAU) changes frequently, but some examples are:

- Sales solutions
- Finance & expense tracking
- Global support pipelines
- Mentorship program apps
- Customer service & engagement solutions
- Employee onboarding & training
- Career development programs
- Event booking systems
- Hardware purchase / refresh process





# Governance Strategy

# Governance Strategy

Protect



Tenant & environment-level security policies

Measure



Inventory & compliance telemetry

Enforce



Compliance-based lifecycle management

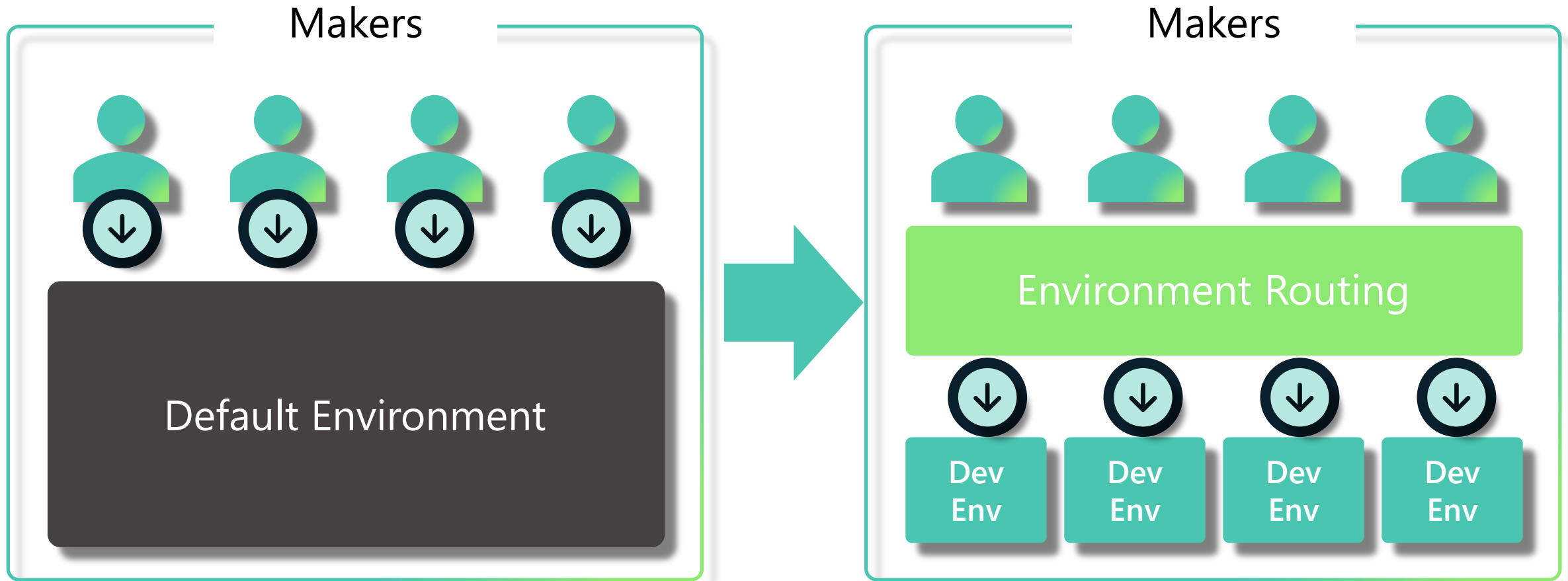
**Macro vs micro governance** – We do tenant-level “macro” governance. We also empower individual organizations to have their own centers of excellence with unique “micro” governance strategies that compliment our macro strategy.

# Environment Architecture Strategy

---

- Moving away from Default & other broadly shared environments
  - All environments must be owned by an individual or team
  - Default environment routing enabled
- Managed Environments **Groups & Rules** infrastructure used to dynamically group environments based on usage scenario
  - Business / development scenarios determine **environment type** to use
  - "Risk" level of group determines ruleset scope

# Environment Strategy - Routing



Moving away from Default; new Makers get Developer environments.

# Environment Strategy - Groups

Group:

**Personal Productivity**



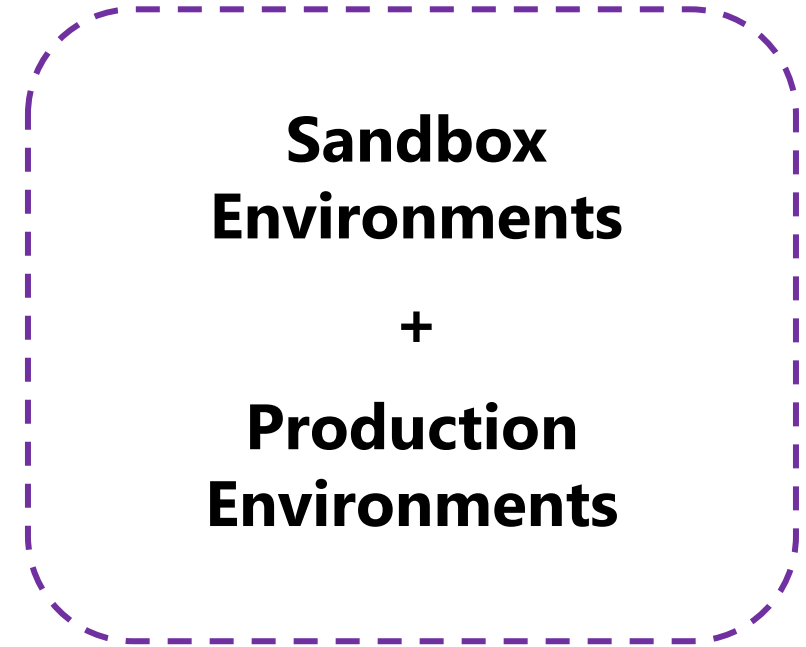
Group:

**Team Collaboration**



Group:

**Enterprise Development & AI**



Lower risk



Higher risk

# Environment Strategy – Rules

Group:  
**Personal Productivity**

## Developer Environments

### Provisioning

Self-service & auto-routing

### Ownership & Sharing Restrictions

One owner, no sharing

### Connector Management

Most 1<sup>st</sup> party connectors, but certain actions blocked

### Lifecycle Management

Inactivity-based

# Environment Strategy – Rules

Group:  
**Team Collaboration**

## Dataverse for Teams Environments

**Provisioning**

Self-service

**Ownership &  
Sharing Restrictions**

Tied to M365 Group  
data label

**Connector Management**

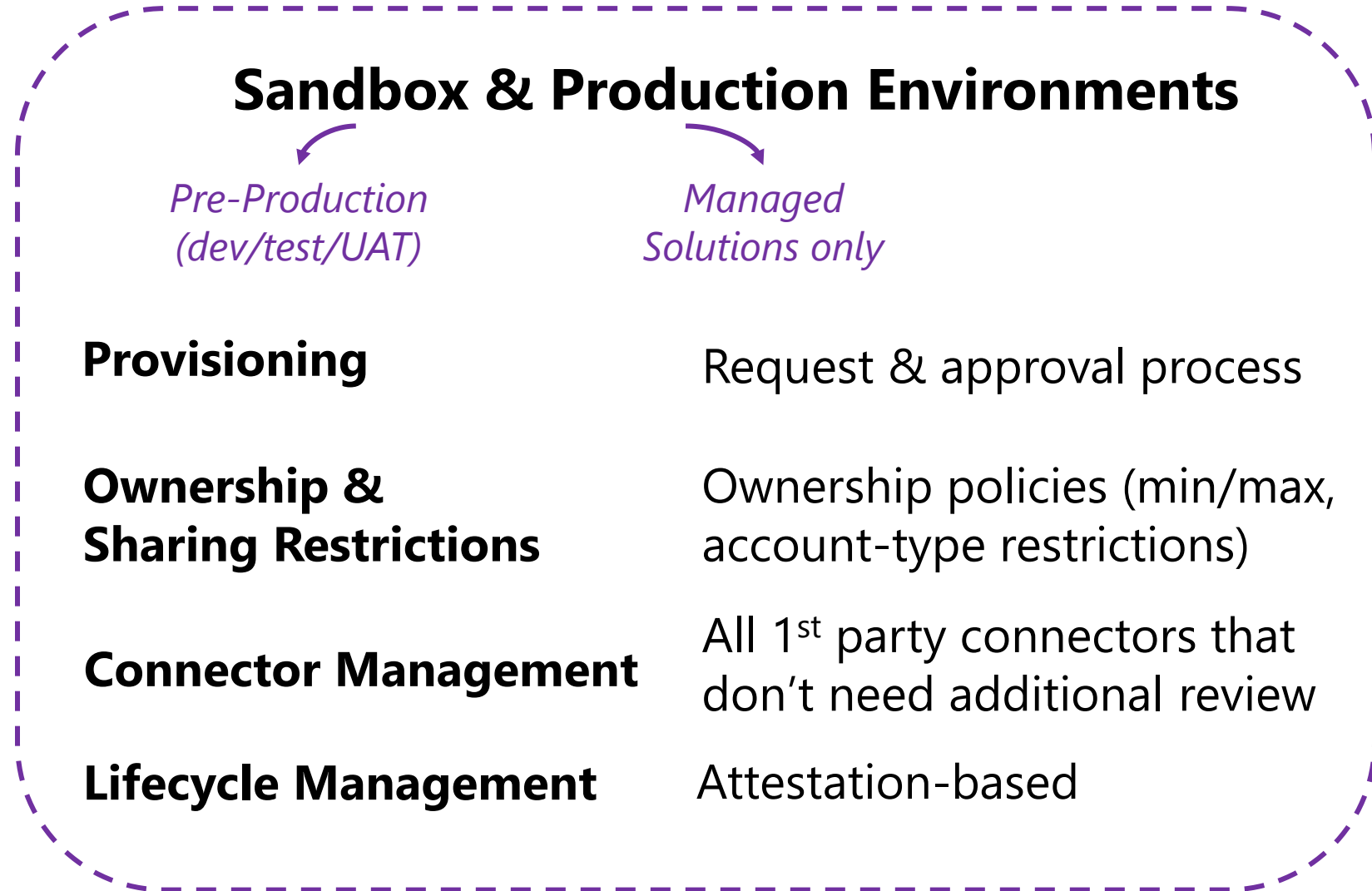
Most 1<sup>st</sup> party connectors,  
but certain actions blocked

**Lifecycle Management**

Inactivity-based & dependent  
on M365 Group lifecycle

# Environment Strategy – Rules

Group:  
**Enterprise  
Development & AI**





# Environment Strategy - Groups

Group:

**Personal Productivity**



Lower risk

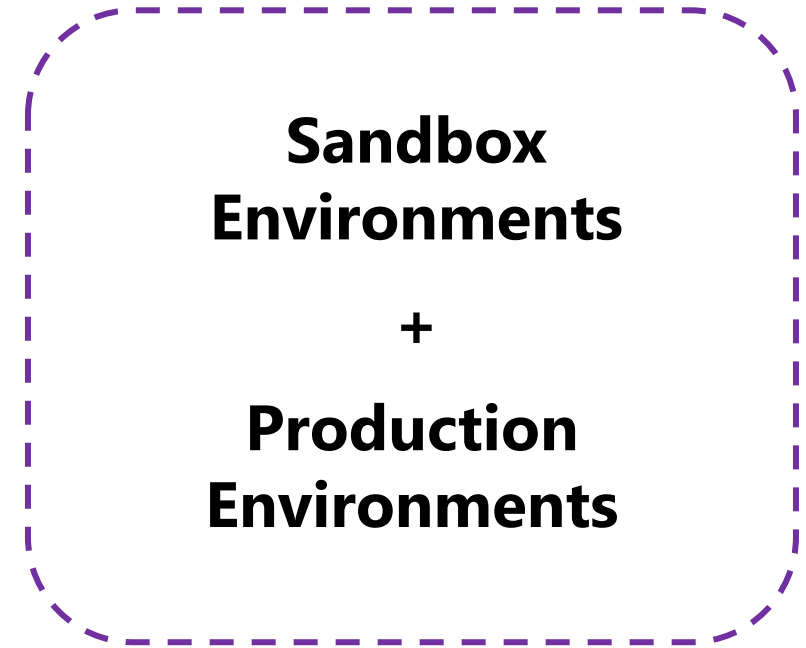
Group:

**Team Collaboration**



Group:

**Enterprise Development & AI**



Higher risk

*Dream state – more granular nested groups based on geo, data labels and usage scenarios*

# Security Policies

---

## Connector Management / DLP

- Restrict allowed connectors and connector actions per environment type
- All 1<sup>st</sup> party connector risk levels analyzed
- 3<sup>rd</sup> party connectors must go through approval process before being allowed in higher-tier environments
- Custom DLP policies can be requested & approved by Security Team for sandbox/production environments

## Tenant Level Policies

- Enforced through PPAC
- Tenant isolation rules to control inbound and outbound traffic
- Endpoint filtering enabled, so certain connectors can only access specific security-approved endpoints

# Compliance Enforcement

- End-user UI for managing asset health
- Biannual attestation of all environments
- Policy enforcement
  - Sensitivity labeling
  - Ownership requirements
  - Compliance reviews based on identified risk & solution components
- Compliance-based lifecycle

MY STUFF

Details Open App Delete Search by Name or ID asset

All 7 Items Show Items with violations only

Name	Created Date	Asset Type	Environment	Status	Action Required	Due Date
<input type="checkbox"/> User Flow v1	02/28/2023	App	ABC Test Environment	System Deleted	Restore	04/28/2023 Restorable until 05/25/2023
<input type="checkbox"/> User Flow v2	02/28/2023	Chatbot	ABC Test Environment	Quarantined	Unquarantine	04/28/2023 Deletion scheduled for 05/25/2023
<input type="checkbox"/> Test App	02/28/2023	Page	ABC Test Environment	In Violation (1)	Remediate	04/28/2023 Remediate until 05/20/2023
<input type="checkbox"/> Fast Test	02/28/2023	Flow	ABC Test Environment	In Violation (2)	Remediate	04/28/2023 Remediate until 05/20/2023
<input type="checkbox"/> App Review	02/28/2023	Pages	ABC Test Environment	In Violation (2)	Remediate	04/28/2023 Remediate until 05/20/2023
<input type="checkbox"/> App Review	02/28/2023	Pages	ABC Test Environment	In Violation (2)	Remediate	04/28/2023 Remediate until 05/20/2023
<input type="checkbox"/> Complete list	02/28/2023	Environment	ABC Test Environment	Compliant		

< Prev Page 1 of 2 Next > Display 7 Items per page

# Inventory & Telemetry

*You can't govern what you can't see...*

## Comprehensive Tenant Inventory



- Daily scanning of all assets
- Azure Data Lake storage
  - Consumable through Azure Data Explorer
- PBI analytics for growth and business insights

## Report Suite



- Row-level access to inventory for stakeholders
- Specific data consumable by org leaders for custom reporting & insights

## Cost & Utilization



- Monitor excessive or costly usage
- Dynamic rightsizing of resources
- Explore AI-driven allocation recommendations

## Compliance Telemetry



- Separate asset health & management dashboards for admins and makers
- Alerts and recommendations based on data patterns



# Tenant Administration

# Launch & Adoption

---

## Platform Capability Intake

- New features reviewed against enterprise readiness standards
- Additional approval workflow for capabilities with more impact potential
- Isolated testing by tenant admins before widespread enablement

## Readiness

- Change management
- User communication campaigns
- Training/materials creation
  - White papers, how-to guides, videos, internal webinars
- Support management

# Tenant Administration

---

## Evaluating New Features on a Large Scale

- Carry out comprehensive evaluations of new features to verify their dependability and effectiveness in one of the largest tenants

## Gathering Preliminary Customer Insights

- Offer valuable perspectives on features that could affect users, serving as a primary source of initial feedback

## Comprehending Governance Effects at Scale

- Work alongside program managers and software engineers to confirm that the platform adheres to required standards for customer satisfaction

## Leveraging Documentation and APIs

- Utilize existing documentation and APIs to pinpoint and address any functionality shortcomings



**Support & Services**



# Platform Fundamentals

---

- Enable employee success with self-service processes
  - Request processes for shared environment access or custom environment provisioning
  - Building block services like data provisioning and RBAC
  - ALM services to package and deploy solutions
- Reduce repetitive or redundant development with basic offerings
  - Catalog of Power App, Power Automate Flow and report templates
  - Domain data provisioning
  - Reusable components (people picker, calendar, etc.)

# Support

## User Communities



- Knowledge sharing and collaboration
- Various Teams & Viva Engage channels/groups for different product types and geos

## End User Support



- Ticketing system for Tier-1 end-user support
  - 1 support head covers ~150 monthly tickets
  - 1/2 architect for technical assistance
- Service Engineering team covers Tier 2 support for items requiring admin support

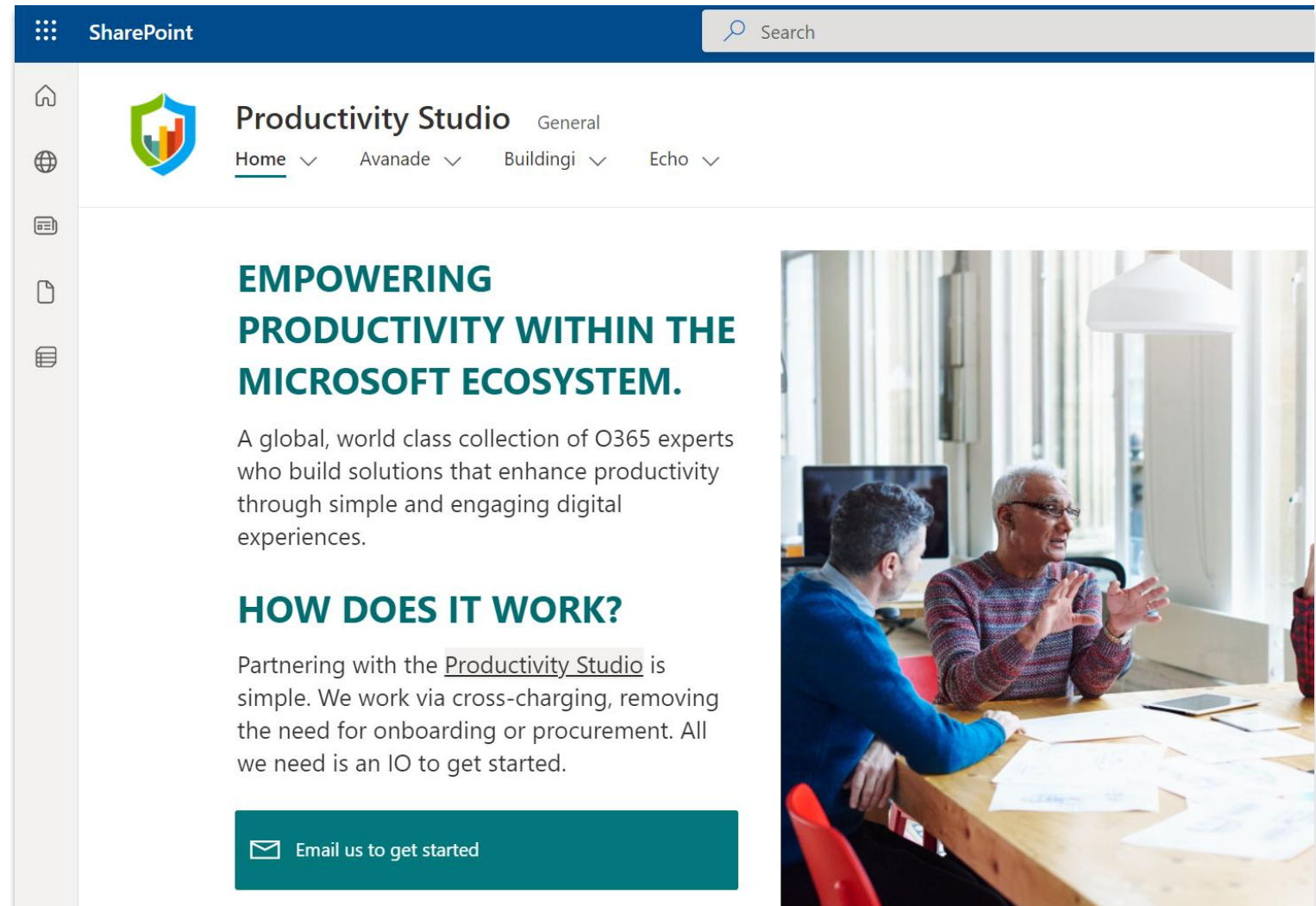
## Training



- Programs run by Product Group
  - App-in-a-day, Admin-in-a-day, etc.)
- Office hours
- MS Digital SharePoint site for tenant-specific docs/info

# Services

- Time and materials work
  - Architectural consultation
  - Developer support
  - App/flow/report development
- Trusted suppliers for speed and compliance
- Suppliers are well versed in full stack (e.g. pick the right tool for the job)



The screenshot shows a SharePoint page for 'Productivity Studio'. The page has a dark blue header with the 'SharePoint' logo and a search bar. Below the header, there is a navigation bar with a home icon, a globe icon, and a list of icons. The main content area features a large heading 'EMPOWERING PRODUCTIVITY WITHIN THE MICROSOFT ECOSYSTEM.' followed by a paragraph: 'A global, world class collection of O365 experts who build solutions that enhance productivity through simple and engaging digital experiences.' Below this is another heading 'HOW DOES IT WORK?' followed by a paragraph: 'Partnering with the Productivity Studio is simple. We work via cross-charging, removing the need for onboarding or procurement. All we need is an IO to get started.' At the bottom of the main content area, there is a green button with an envelope icon and the text 'Email us to get started'. On the right side of the page, there is a photograph of two men sitting at a table, engaged in a discussion. One man is wearing a blue sweater and the other is wearing a red and white patterned sweater. They are looking at documents on the table.



Thank you! Questions?

# Tiered Environment Architecture Strategy (Old)

