

improving 

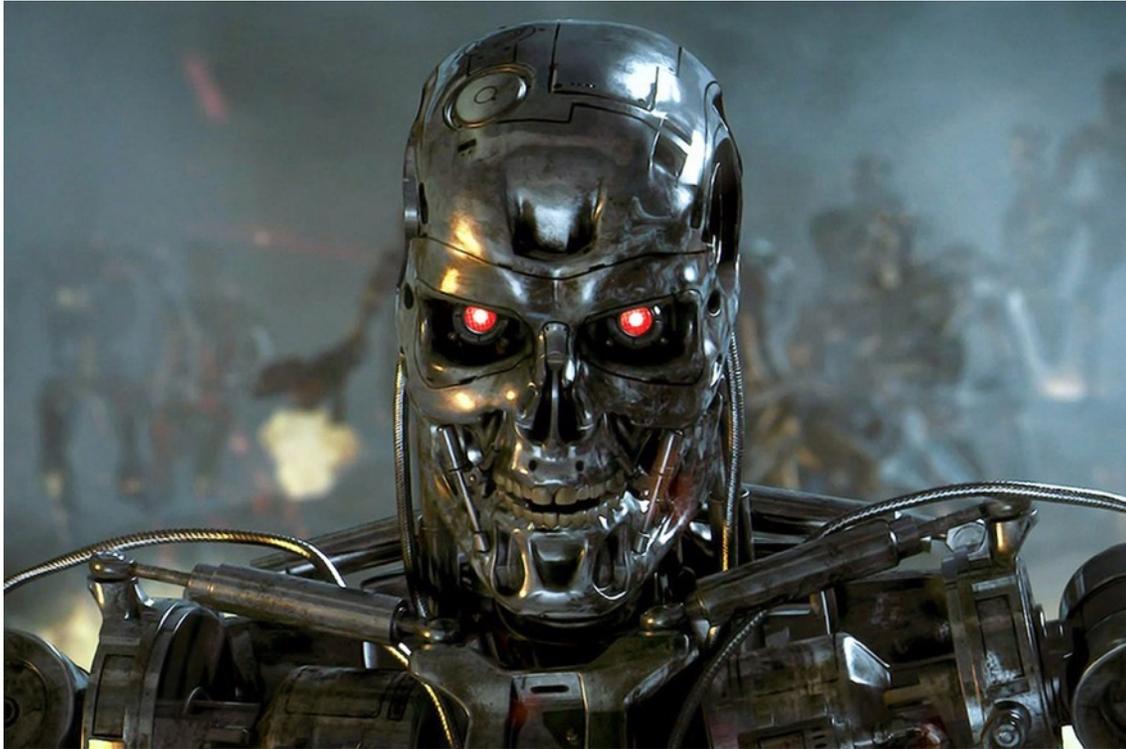
## **Current and Future state of AI – Software Development Tooling**

In partnership with

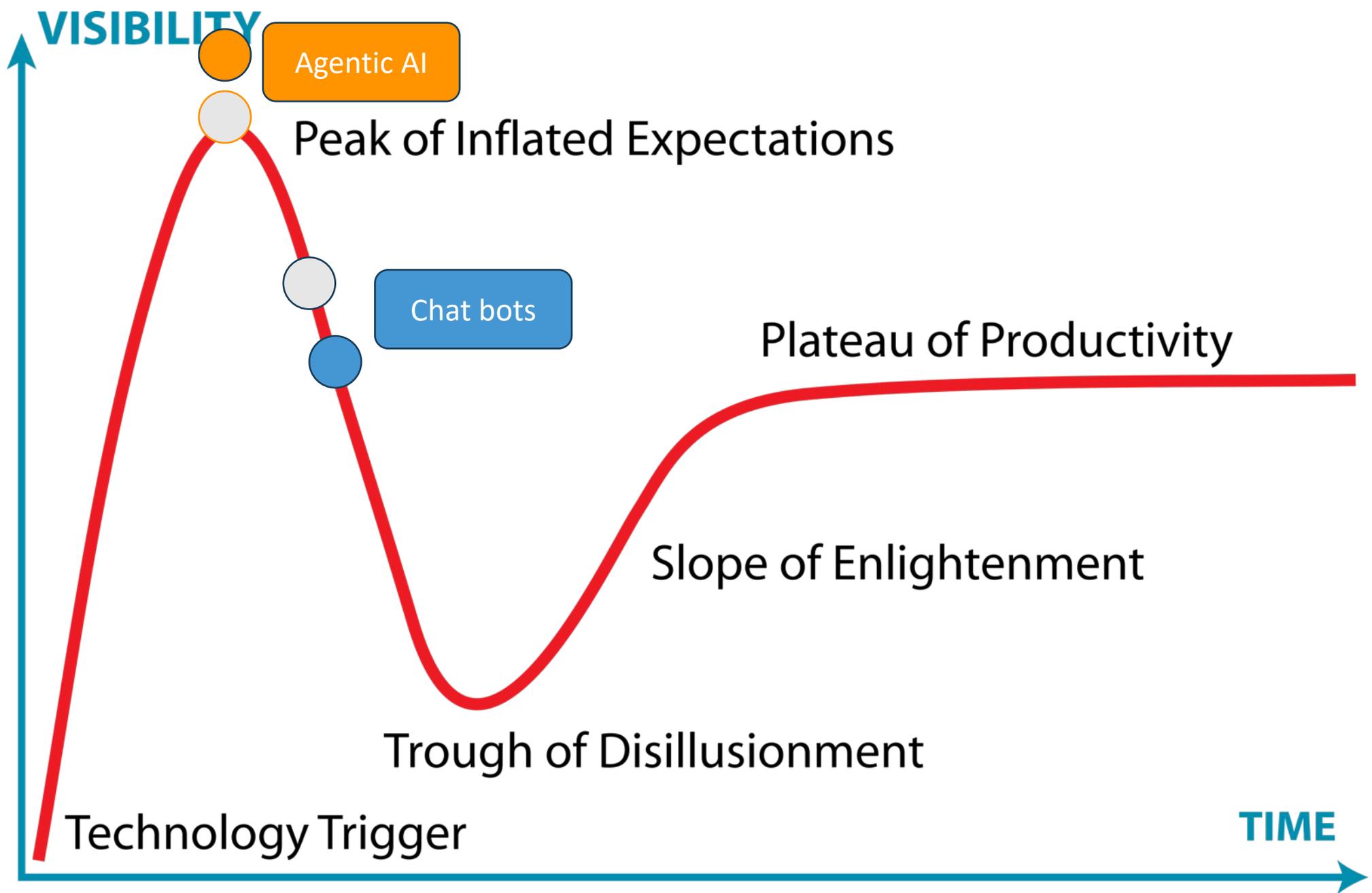


**CONFLUENT**

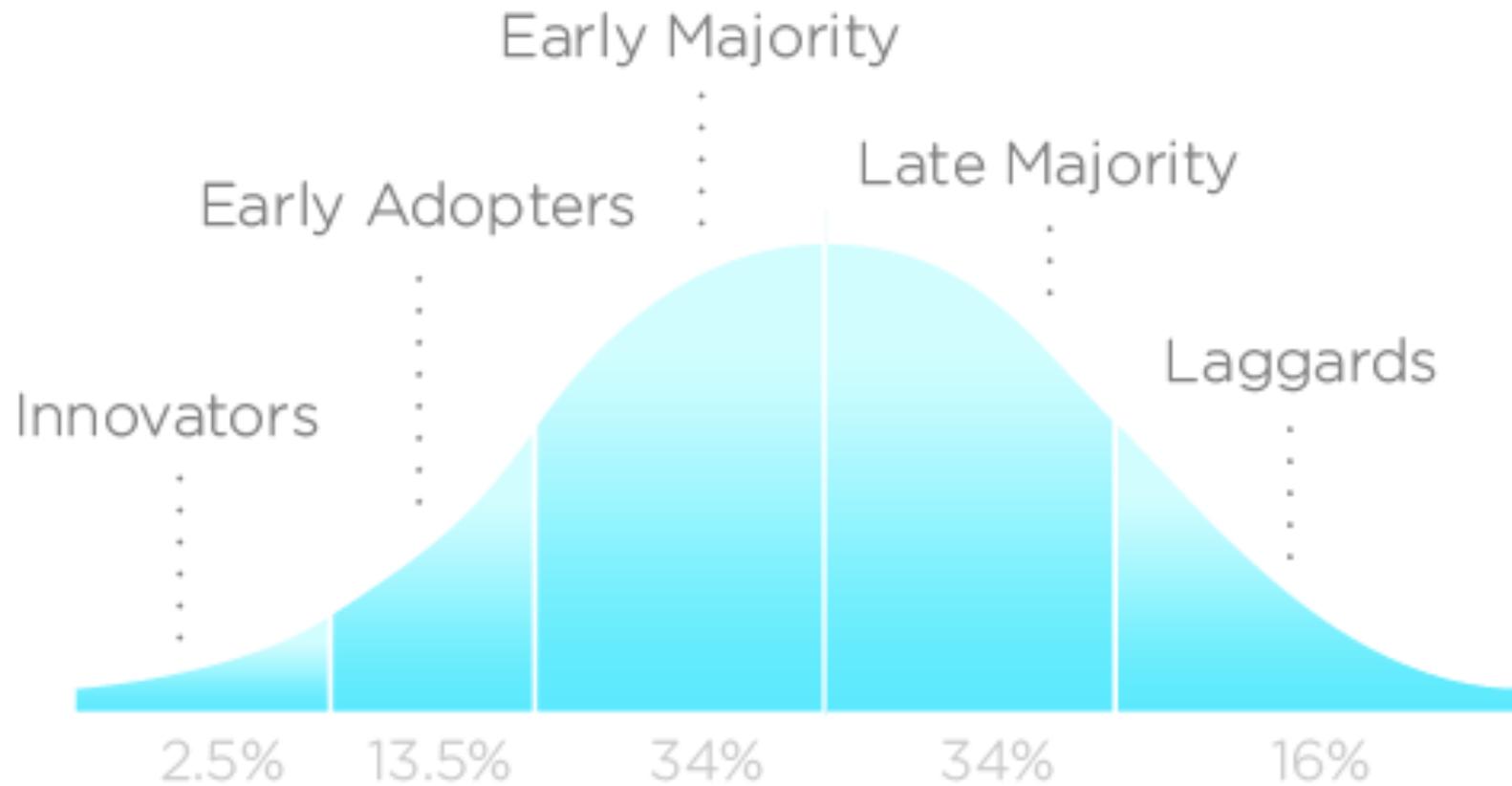
# Common perceptions of AI



*"Greetings, I am your new A.I. assistant...I just sorted all your emails...cleaning up invoices...corporate inefficiencies detected...starting mass layoffs...dumping stocks on the market...poor market reaction, selling all assets...this company is now insolvent, shuttering all operations...you are now fired...goodbye!"*



# Diffusion of Innovations

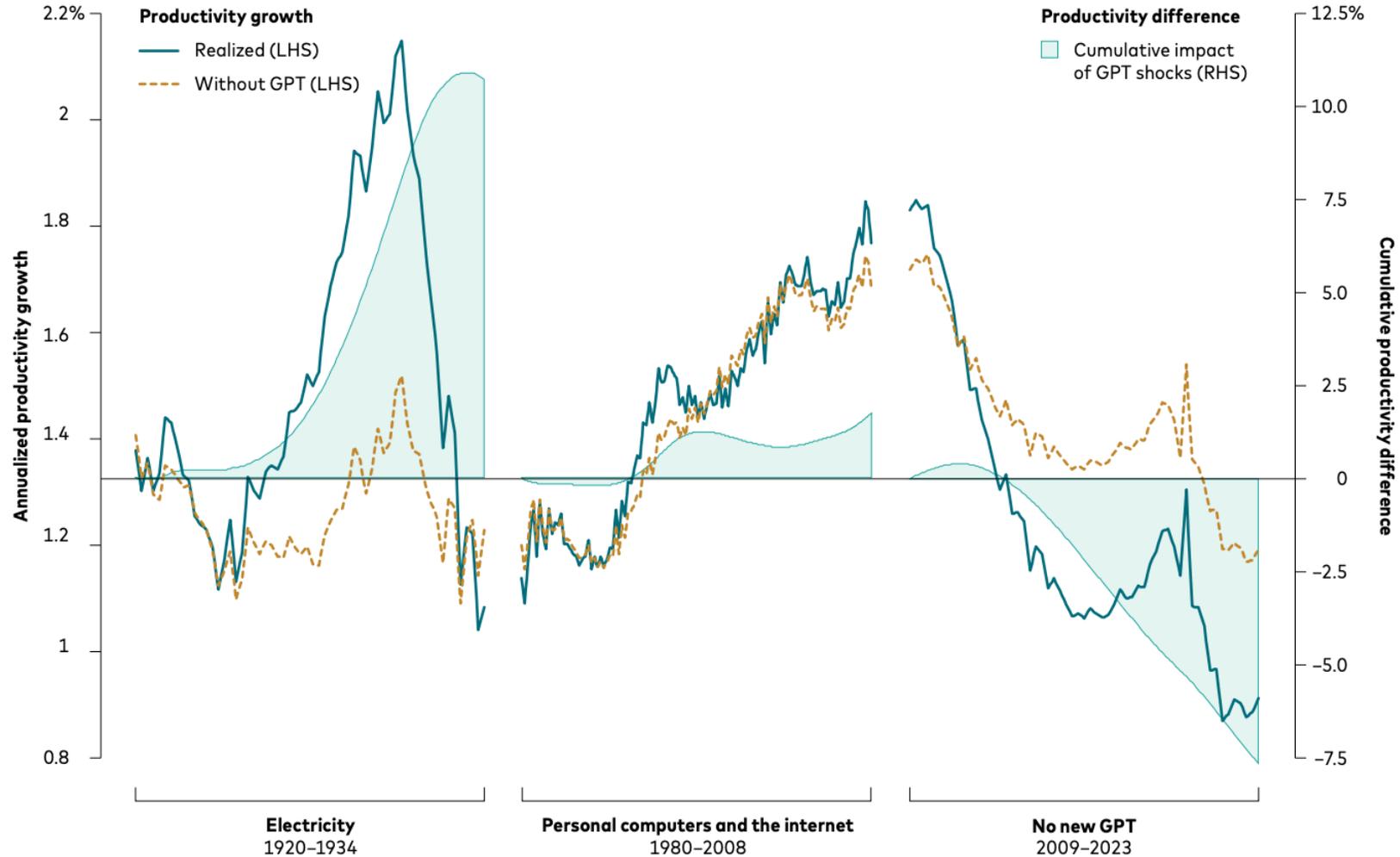


# Not that GPT

## Generally Productive Technology

FIGURE 6

GPTs: The good (electricity), the OK (computers and the internet), and the ugly (no new GPT)



# It's the Data

402.7 million terabytes of data is generated daily (2024)

Year	World Storage Size (Exabytes)
1986	2.6 EB
1993	15.8 EB
2000	54.5 EB
2007	295 EB
2014	5,000 EB
2020	6,800 EB
2024	149,000 EB

# It's the Data

## Definitions

**Gigabyte – iPhone storage size**

**Terabyte – 1,000 Gigabytes**

**Petabyte – 1,000 Terabytes**

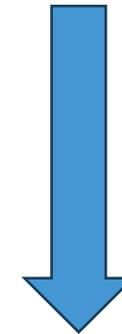
**Exabyte – 1,000 Petabytes**

**Zettabyte – 1,000 Exabytes**

**Yottabyte – 1,000 Zettabyte**

**149 ZB**

2024 Global Data



21% Increase

**181 ZB**

2025 Global Data

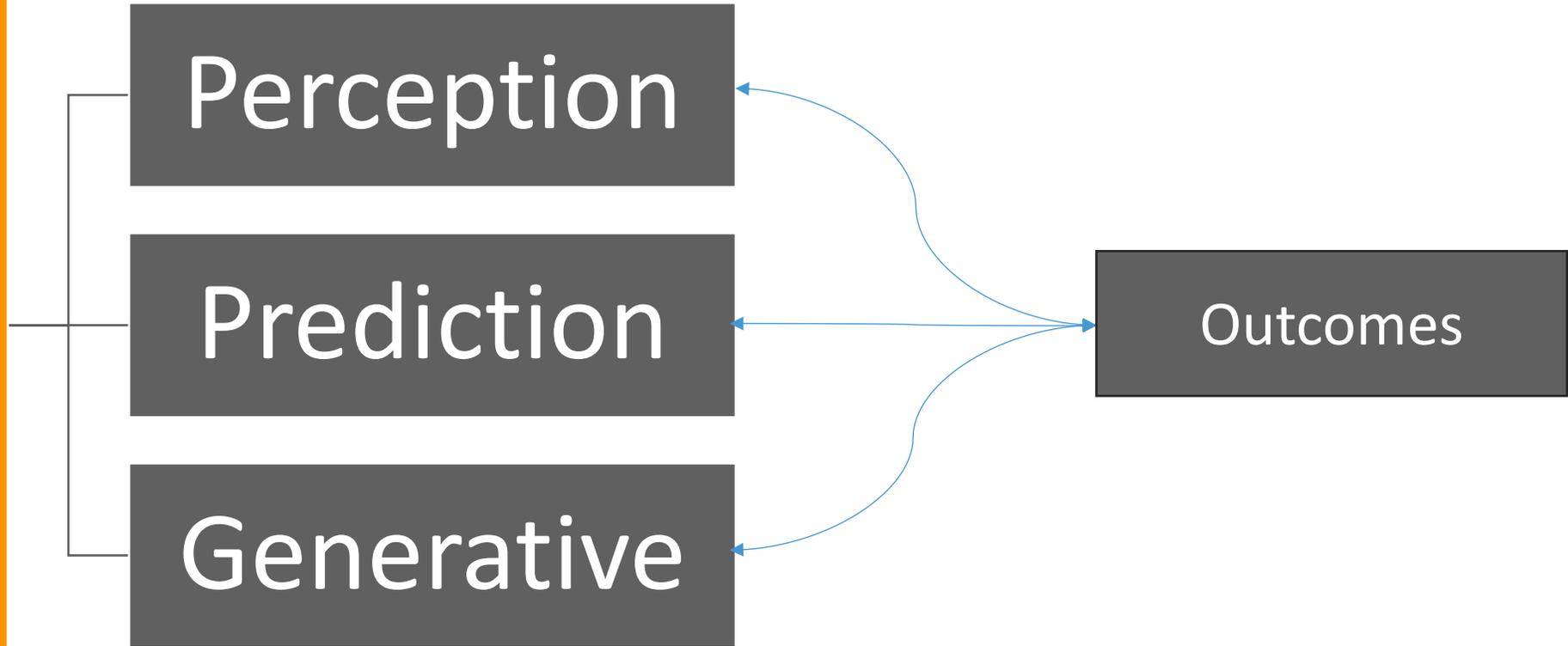
# Defining AI

What is your definition?

# AI and ML at the simplest



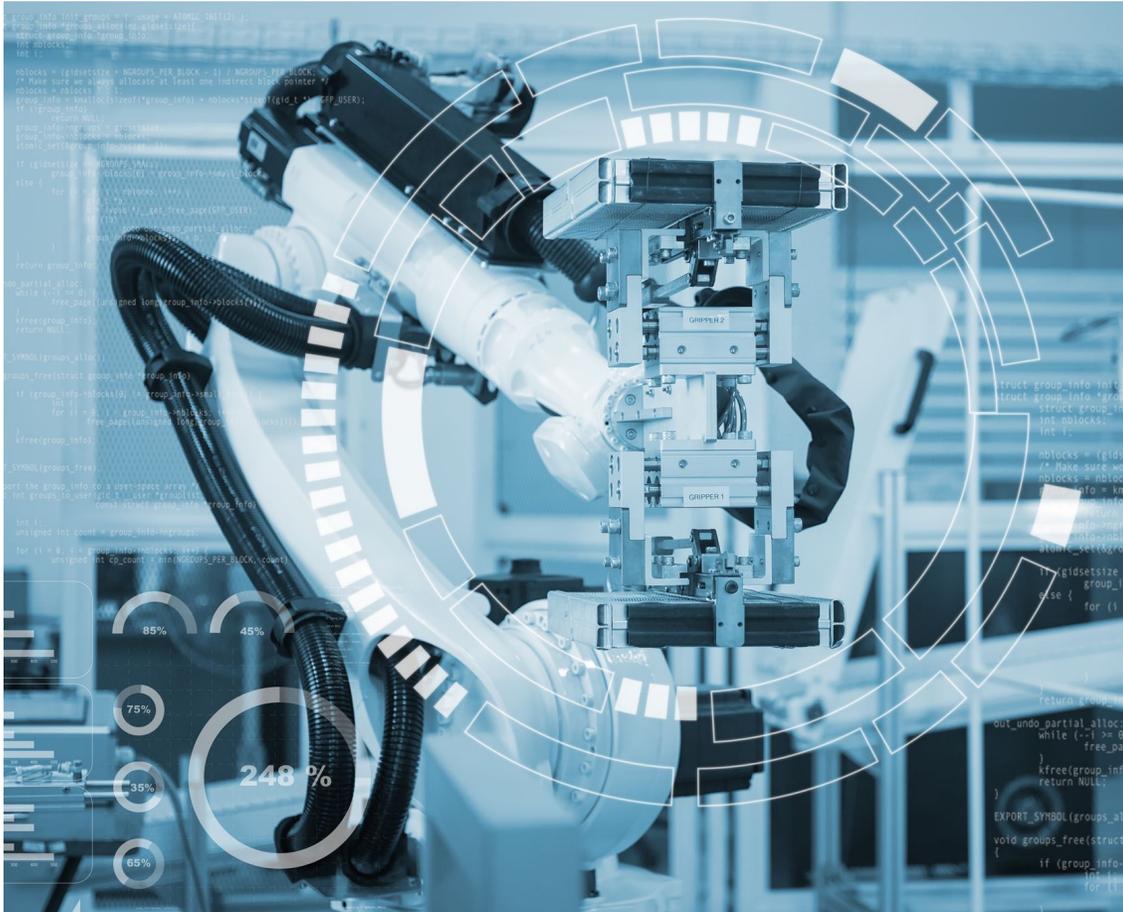
# Artificial Intelligence



A black and white photograph showing a large number of puzzle pieces scattered across a light-colored surface, likely a table. The pieces are dark in color and are arranged in a somewhat chaotic pattern. In the upper left corner, a hand is visible, reaching towards the puzzle pieces. The background is dark and out of focus, suggesting an indoor setting. The word "Complexity" is overlaid in white text in the center of the image.

Complexity

# Labor Compression in Technology

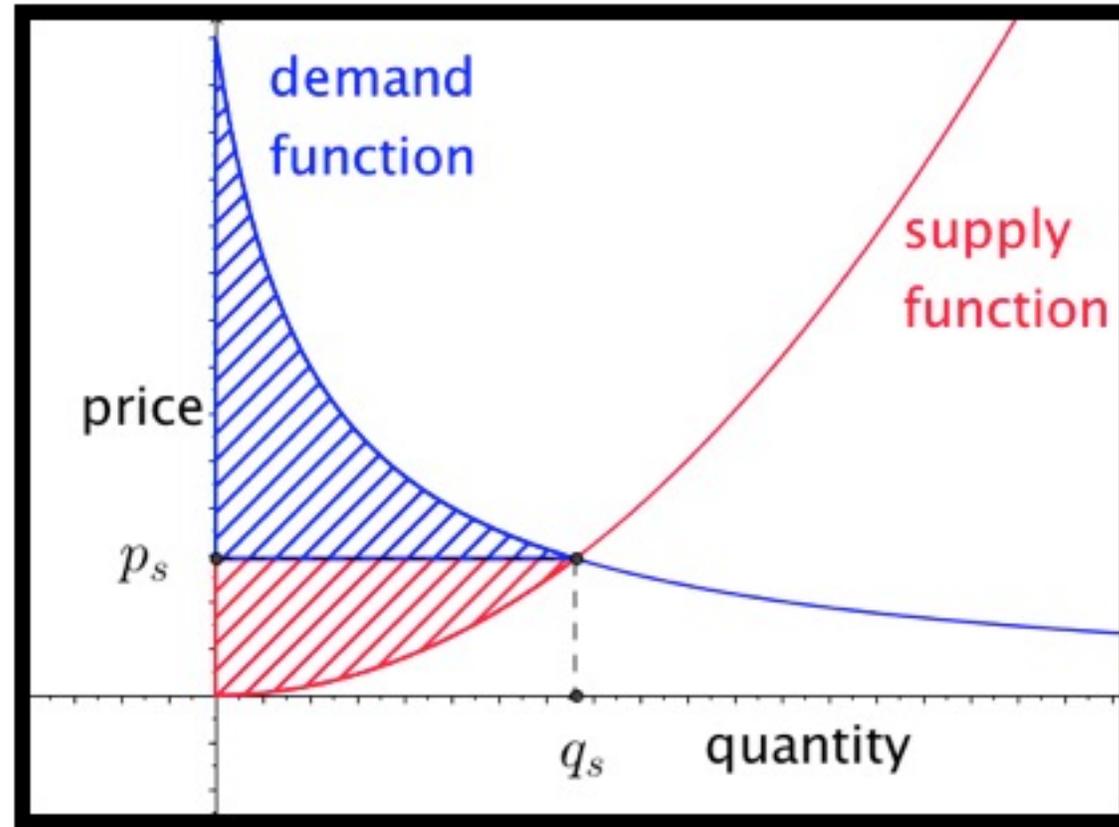


Labor compression refers to the reduction of hours of effort in a job roles.

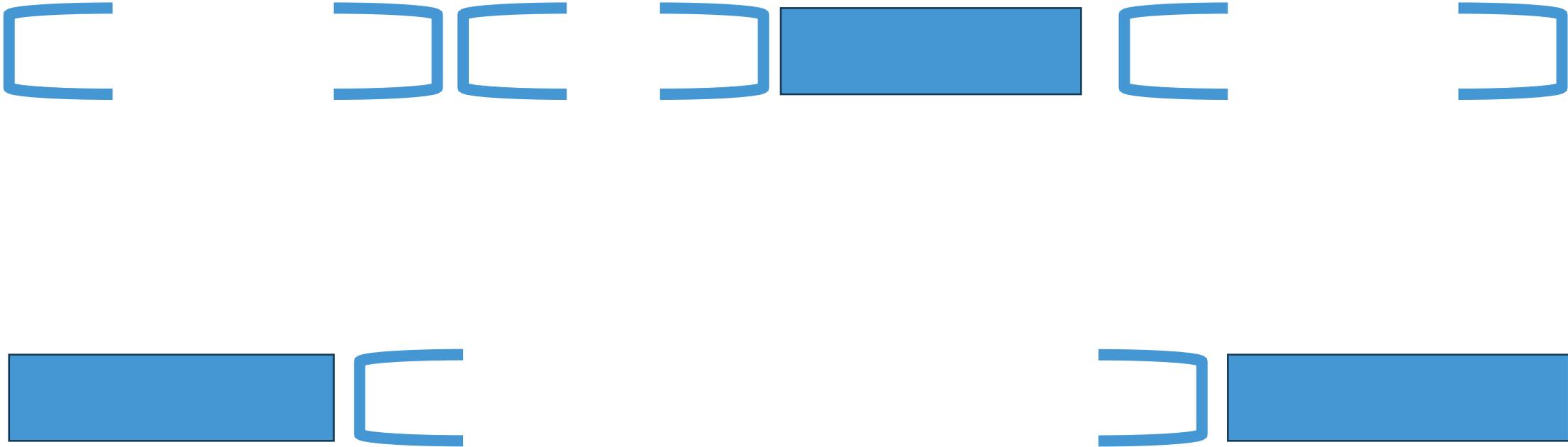
Technological advancements are streamlining various job functions.

Workers must adapt to new skills to stay relevant in the workforce.

# What AI can displace tasks that are demand limited

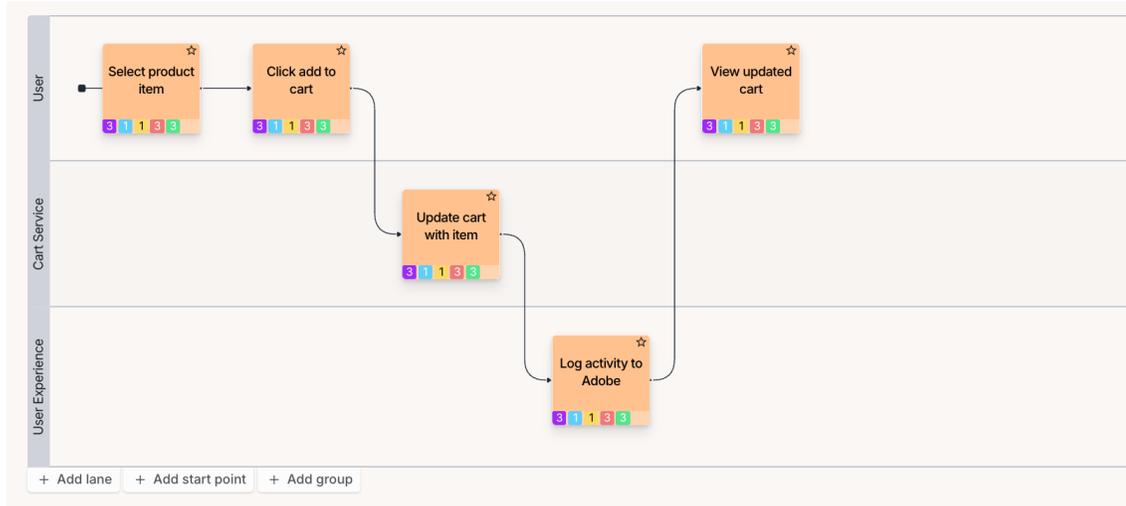


# What AI can displace tasks that are collapsable



**Design + AI**

# Design Use Cases



Generate Saved ↻

**Use case**

Wireframes Hifi Designs

Advanced (2.0)  
Optimized AI model 6

**Select Type**

Desktop

**Context**

Product Name: ShopEase

Product Description:  
ShopEase is an intuitive web experience designed to streamline

Enhance prompt

Min. 5 characters 1311

**Create Flow** Autoflow

- Homepage with ShopEase logo, search bar, and shopping cart icon
- Product detail screen featuring product image

**Development + AI**

# Development Use Cases

CHAT

AuditLogAndUser.cs Current File

Where is this class used?

This `AuditLogAndUser` class appears to be a Data Transfer Object (DTO) that combines an audit log entry with its associated user information. It's likely used in auditing scenarios where you need to track both the audit log details and the user who performed the action.

To find where this class is used, you would typically:

1. Search for references to `AuditLogAndUser` in your solution
2. Look for:
  - Audit log reporting features
  - Audit log viewing/listing functionality
  - Audit history displays
  - Security monitoring components

Without access to the full codebase, I can't tell you the exact usage locations, but based on the namespace (`Stakeholders.Auditing`) and the fact it's using ABP Framework's auditing features, it's likely used in:

1. Audit log queries/reports
2. API endpoints that return audit information
3. Background services that process audit logs
4. User activity monitoring features

To find the exact usage, you can:

1. Use your IDE's "Find All References" feature
2. Search your entire solution for "AuditLogAndUser"
3. Check your audit-related controllers and services

Would you like me to help you locate the specific usage

Add a new DTO that extends AuditLogAndUser to include claims and role information

Accept Reject Follow-up instructions... K

```
/// <summary>
/// A helper class to store an <see cref="AuditLog"/>, <see cref="User"/>, claims and role information.
/// </summary>
public class AuditLogUserAndClaims : AuditLogAndUser
{
    public IList<string> Claims { get; set; }

    public IList<string> Roles { get; set; }

    public AuditLogUserAndClaims()
    {
        Claims = new List<string>();
        Roles = new List<string>();
    }
}
```

**QA + AI**

# QA Use Cases

The screenshot displays the Functionize web interface for a test run titled "Finding my project". The interface includes a navigation bar with "Projects", "Reports", "Orchestrations", "TDM", and "Team". Below the navigation bar, there are buttons for "Test Settings", "Test Actions", and "Info". The main content area shows the test execution details, including the browser used ("Chrome 85"), the action log, and the run history. The test was executed on 2021-03-23 at 14:32:56 (PDT) by Functionize Blog, with 1 instruction and 12 actions. The test steps are listed as follows:

1. Open Url `http://gazebosim.org/gzweb.html`
1. Pageinit ✓ Load URL `'http://gazebosim.org/gzweb.html'`
2. Click ✓ Click A element with TEXT `'Projects'`
3. Urlchange ✓ Change URL `'http://gazebosim.org/projects'`
4. Click ✓ Click H3 element with TEXT `'GzWeb'`
5. Urlchange ✓ Change URL `'http://gazebosim.org/gzweb'`
6. Verify ✓ Verify TEXT attribute for H5 element `is equal to 'Dependencies'`
7. Verify ✓ Verify TEXT attribute for A element `is equal to 'Build GzWeb'`
8. Verify ✓ Verify TEXT attribute for A element `is equal to 'Running'`

```
21  /* Step 1 */
22  it('should render the page', async () => {
23    await Utils.clickMenu('Administration', 'Audit logs');
24    await Utils.waitForTableContent();
25    await Utils.replaceWith('.tab-content', 'REPLACED_DUE_TO_DYNAMIC_DATA');
26
27    const shot = await Utils.screenshot.test(AUDITLOGS_PAGE_RENDER);
28    expect(shot).toHaveNoChanges();
29  });
30  });
31  });
32  });
33  Add another test for AUDIT Logs to see if tab content is empty
34  Accept Reject Follow-up Instructions... ⌘K
35  /* Step 2 */
36  it('should show empty state when no logs exist', async () => {
37    // Navigate to empty audit logs
38    await Utils.clickMenu('Administration', 'Audit logs');
39    await Utils.waitForTableContent();
40
41    // Verify empty state is displayed
42    const emptyStateElement = await page.$('.tab-content .empty-state');
43    expect(emptyStateElement).not.toBeNull();
44
45    // Take screenshot to verify empty state
46    const shot = await Utils.screenshot.test('auditlogs.code-flow.empty-state');
```

**CI/CD + AI**

# CI / CD Use Cases

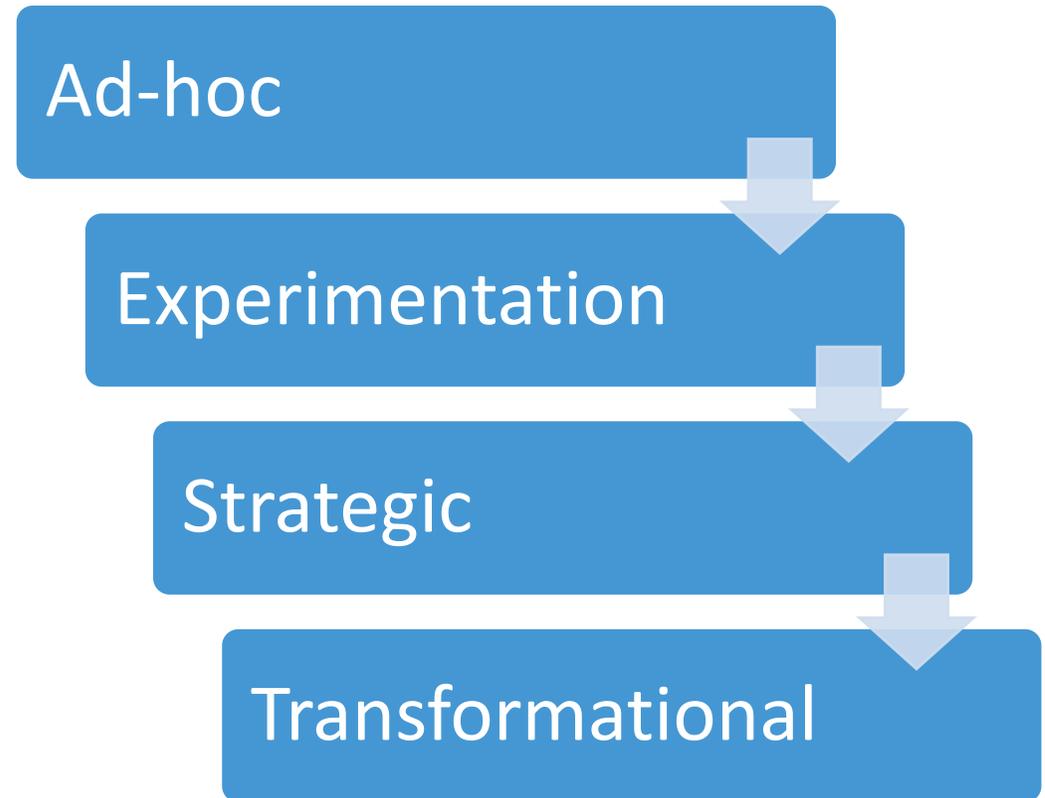
The screenshot displays the Terraform Cloud interface. On the left, a sidebar contains navigation options: Variables, Locals, and Outputs. Below these are sections for Modules (with Import and Catalog buttons), Design (with General, Icons, Logos, and Shapes sub-sections), and Containers (listing Availability Zone, Resource Group, Group, Location, and Provider Alias for subscription). The main workspace shows a visual diagram with three nodes: application\_insights\_sta..., cosmosdb\_account, and cosmosdb\_table. A toolbar at the top of the workspace includes icons for search, zoom, and other editing functions. On the right, a 'TERRAFORM CODE' pane shows the Terraform code for 'main.tf' with a 'PULL REQUEST' and 'PLAN' button. The code defines three resources:

```
1 resource "azurerm_cosmosdb_account" "cosmosdb_account" {
2   tags    = merge(var.tags, {})
3   location = "East US"
4 }
5
6 resource "azurerm_cosmosdb_table" "cosmosdb_table" {
7 }
8
9 resource "azurerm_application_insights_standard_web_test" "application_insights_standard_web_test" {
10  tags    = merge(var.tags, {})
11  location = "East US"
12 }
13
14
```

At the bottom of the workspace, a status bar indicates 'Number of nodes: 3'.

# What is the AI Adoption Framework?

AI Adoption Framework is a framework to help enterprises evolve their ML/AI project adoption to follow best practices and eliminate potential areas of unnecessary cost. Proper implementation of this framework is necessary to ensure a profitable adoption of AI.



# How to get started? – Framework for Change

## Starting tomorrow – I want to be a superhuman

### Problem Selection

- Create a list of the top 10 things you do each week by the amount of time they take
- Put stars next to the ones you HATE doing
- Pick the highest amount of time starred item

### Exploration

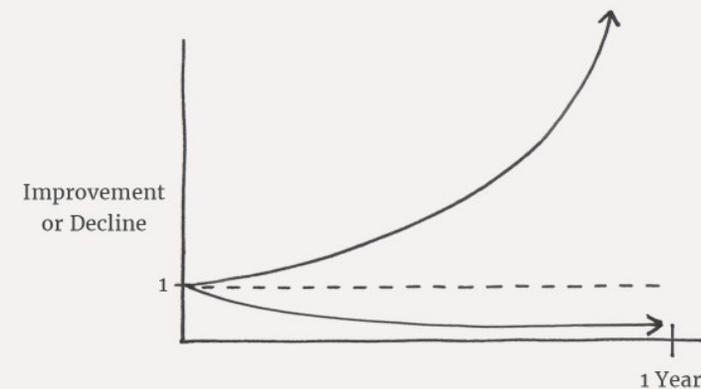
- Spend 30 minutes thinking through how to automate significant portions of that work for yourself
- Test it – Did it save time and make you feel better about your job?
- If yes to both, share it so that the rest of the organization can benefit

### Guidelines

- New tools – Make sure they get reviewed BEFORE you use them
- New Knowledge – Aim for 10% understanding to start, not 50%
- Share – Talk about your experiments, others may be doing similar, and you can go farther together

## The Power of Tiny Gains

$$\begin{aligned} 1\% \text{ better every day} & \quad 1.01^{365} = 37.78 \\ 1\% \text{ worse every day} & \quad 0.99^{365} = 0.03 \end{aligned}$$



JamesClear.com

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**Questions?**

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