



PURE IT

AI: New Frontiers of Risk and Security

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**CISO, Co-Founder &
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Serves as the internal CISO for Pure IT and as a virtual CISO or CIO to many clients. Active in providing assessments and roadmaps for our clients in People, Process, Technology, and Business Management. A resource to financial institutions because of his extensive knowledge of the industry, Business Operations, IT and Security. Serves as an advisor to financial institution Boards who need to provide a credible challenge to their technology teams and a regular speaker at security and financial services industry conferences throughout the country.

CISSP, CCSK, SAS-AP and on Advisory Board of the NCU-ISA0.

**Transforming Banks and Credit
Unions into Technology Institutions
with Financial Services**



Pure IT CUSO

- **Solutions are empty without Strategy**

Partners with the Financial Services Industry

Vendor independent

Walking alongside FI's on the Digital Journey

Assessment, Roadmap

Remediation, Implementation

Managed Services

Professional Managed Services (vCIO, vCTO, vCISO)



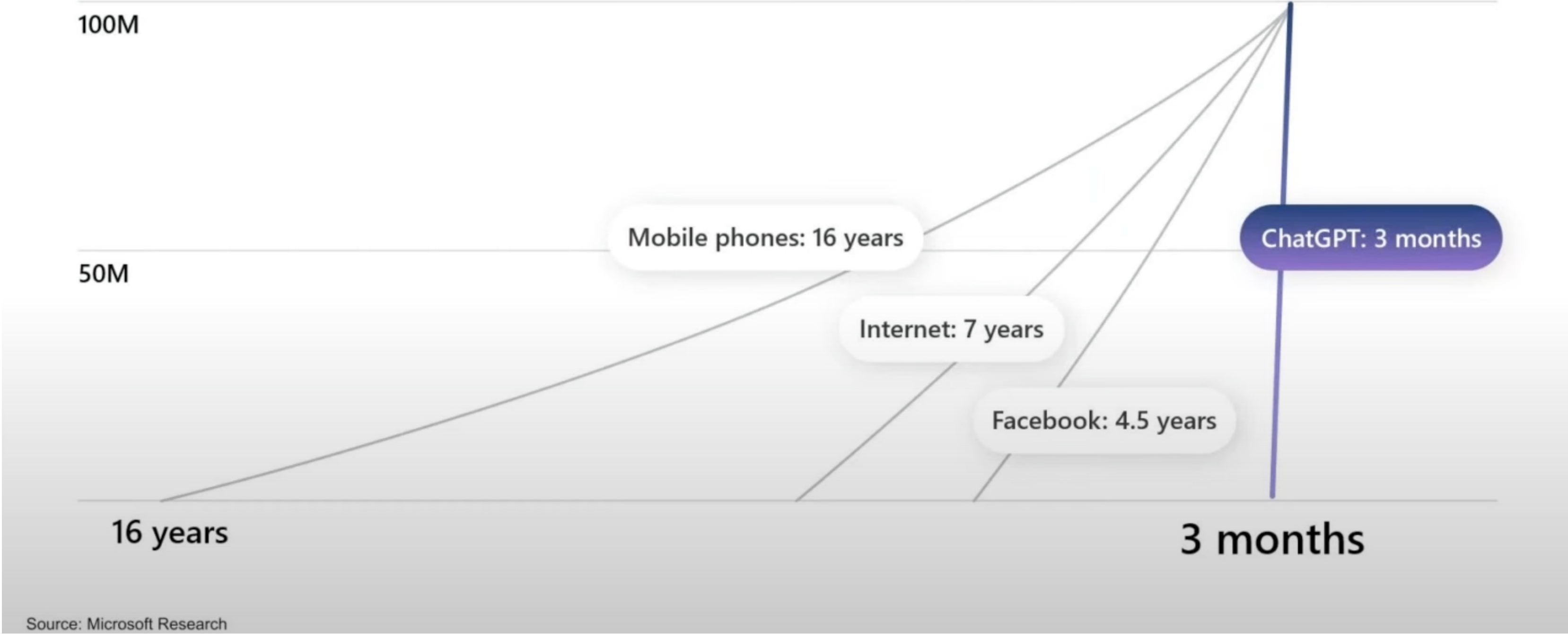


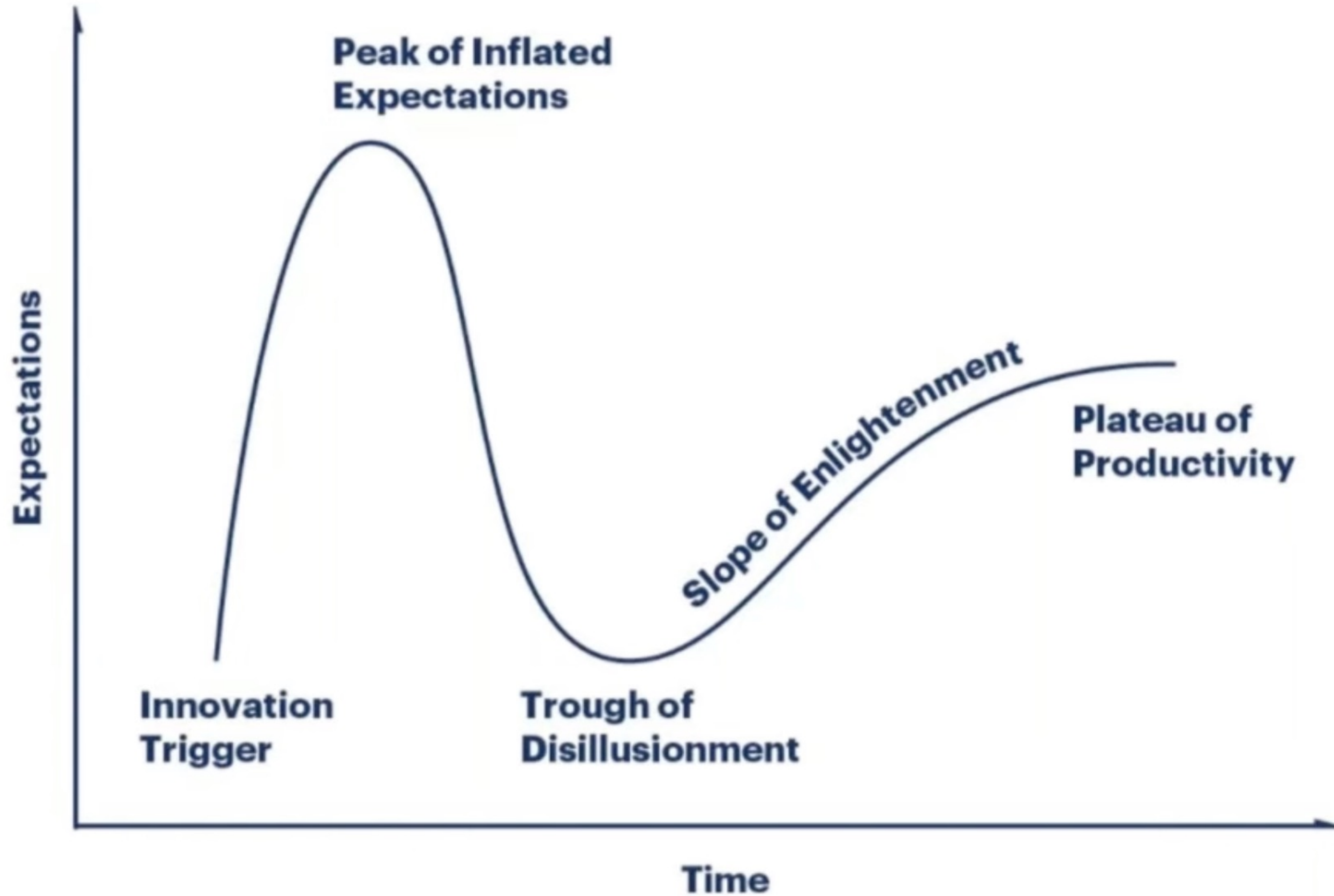






Time to reach 100M users





What is AI?

- **Natural Language Processing (NLP)**
 - Large Language Models (LLM)
 - Generative Predictive Text (GPT)
- **Predictive Modeling**
 - Insights from past data
 - Business Intelligence
 - Detailed or High-Level Views
- **Computer Vision**
 - Pulling data from Images
 - Generating Images



You

Explain how AI can be used to improve security at a financial institution



Copilot

AI can significantly enhance security at financial institutions by leveraging its ability to analyze large datasets and identify patterns that may indicate fraudulent activity. Here are some ways AI contributes to security:

1. **Fraud Detection:** AI systems can monitor transactions in real-time, identifying anomalies that could suggest fraudulent activity ¹.
2. **Risk Management:** By analyzing transaction data, AI can help in managing risks related to security, fraud, anti-money laundering (AML), know your customer (KYC), and compliance initiatives ².
3. **Regulatory Compliance:** AI can streamline compliance processes by optimizing calculations and reducing network latency for faster, more secure transactions ³.
4. **Cybersecurity:** AI can manage cybersecurity risks specific to the financial sector, including identity impersonation and synthetic identity fraud ⁴.

Financial institutions are investing in AI to not only improve security but also to enhance customer service, reduce costs, and increase overall efficiency. Microsoft, for example, provides AI solutions through its cloud services that include built-in privacy, security, and compliance controls, which are essential for the financial services industry ⁵.



You

Explain how AI can be used to improve security at a financial institution in pirate



Copilot

Arr matey! Let me spin ye a yarn 'bout how them clever AI deckhands be bolsterin' the security of our treasure-filled financial galleons:

1. **Scallywag Spotting:** AI be like a keen-eyed lookout in the crow's nest, scannin' the seas of transactions fer any odd ripples that might signal the approach of ne'er-do-wells lookin' to plunder our loot.
2. **Risk Maraudin':** By divin' into the depths of data, AI charts a course through stormy waters, helpin' to navigate the perils of security breaches, money launderin', and keepin' the ship in line with the King's regulations.
3. **Regulatory Riggin':** AI shanties make the task of abidin' by the crown's decrees a breeze, calculatin' and communicatin' with the speed of a sloop on the open waves, all secure-like.
4. **Cyber Seafarin':** AI be settin' up defenses against the digital corsairs and cutthroats that try to disguise themselves or create phantom identities to sneak aboard and steal our precious doubloons.

So hoist the Jolly Roger of AI, me hearties, and let it guide us to safer harbors in the vast ocean of finance! Yarrrr! 🏴‍☠️



You

Explain how AI can be used to improve security at a financial institution like a 5th grader



Copilot

Okay, imagine you're playing a game of capture the flag at school. Your team's flag is like the bank's money, and you want to keep it safe from the other team, who are like the bad guys trying to steal it.

AI is like having the coolest, smartest kid in school on your team. This kid is super good at spotting the sneaky kids from the other team who are trying to grab your flag when you're not looking. Here's what the smart kid does:

1. **Spotting Cheaters:** AI is like having eyes everywhere. It can spot anyone trying to cheat and grab your flag (or the bank's money) when they shouldn't be.
2. **Making Rules:** It helps make sure everyone plays by the rules, so no one can cheat and make things unfair.
3. **Keeping Score:** AI keeps track of the points and makes sure no one messes with the scoreboard.
4. **Guarding the Flag:** It's like the best goalie ever, always guarding your flag and making sure no one can sneak past and take it.

So, AI helps banks keep their money safe just like the smartest kid in school helps you win at capture the flag by keeping an eye out for cheaters and guarding your flag! 🏰🚩

Banking Analysis

Region

All

City

All

Last Refresh Date
1/17/2023 4:43:27 PM



Loan Details



Client Details



Account Details

4500

Total Accounts

5369

Total Clients

682

Loan Accounts

682

Loan Amount

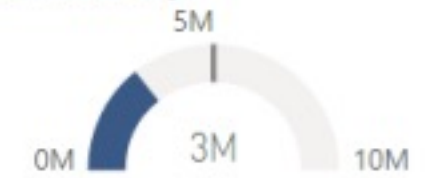
682

Loan Repayment

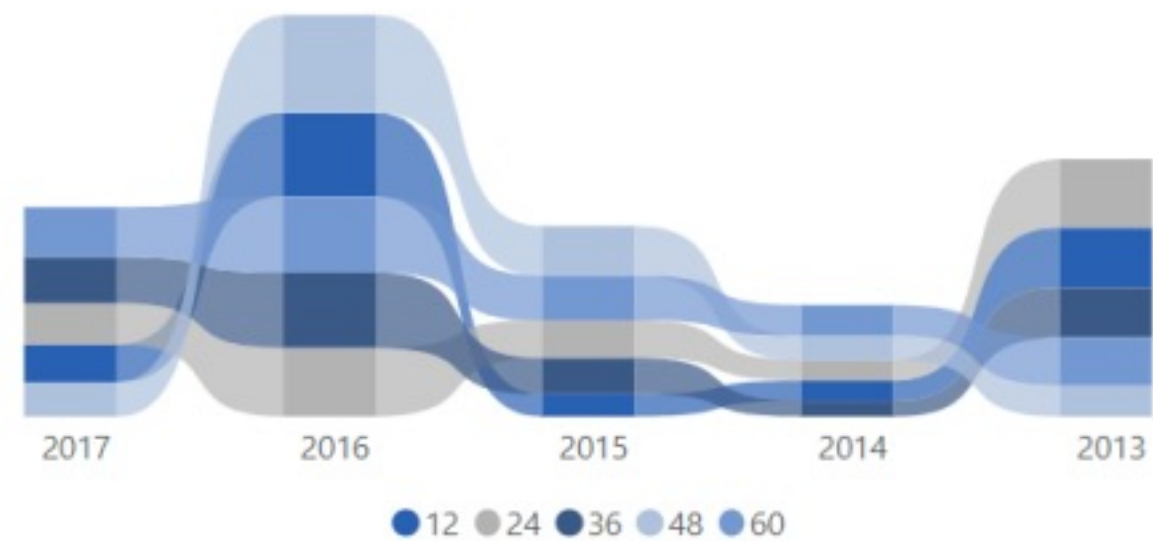
1M

Total Balance

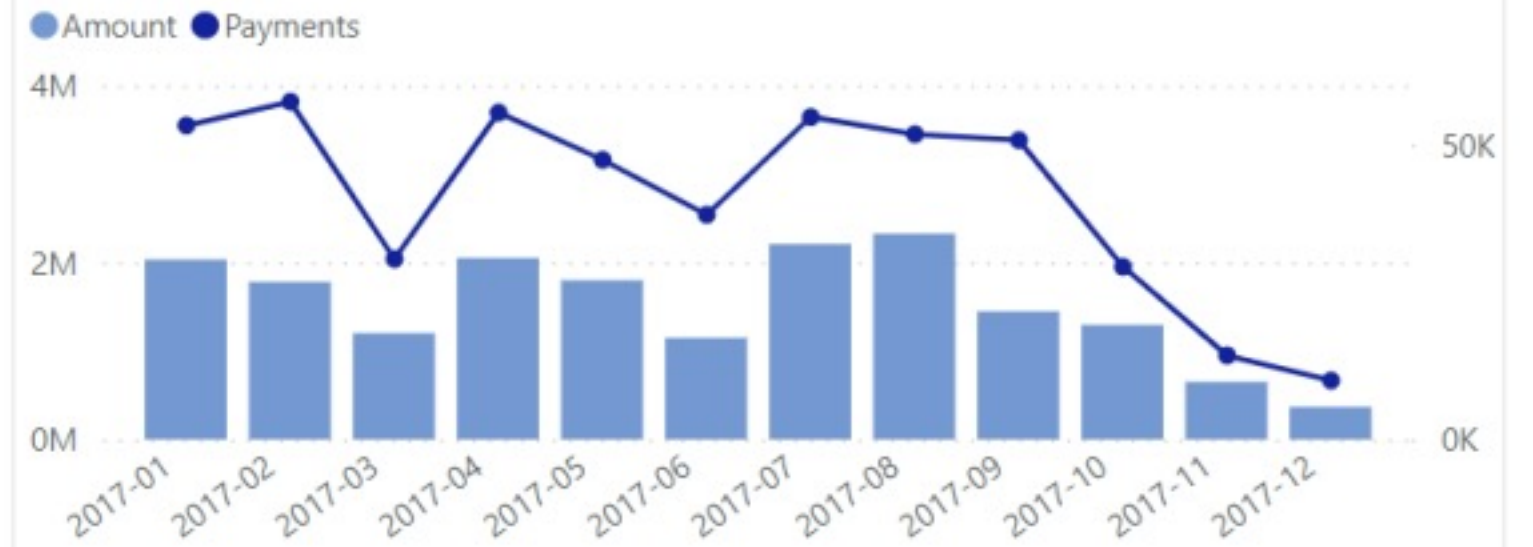
Loan Recovery



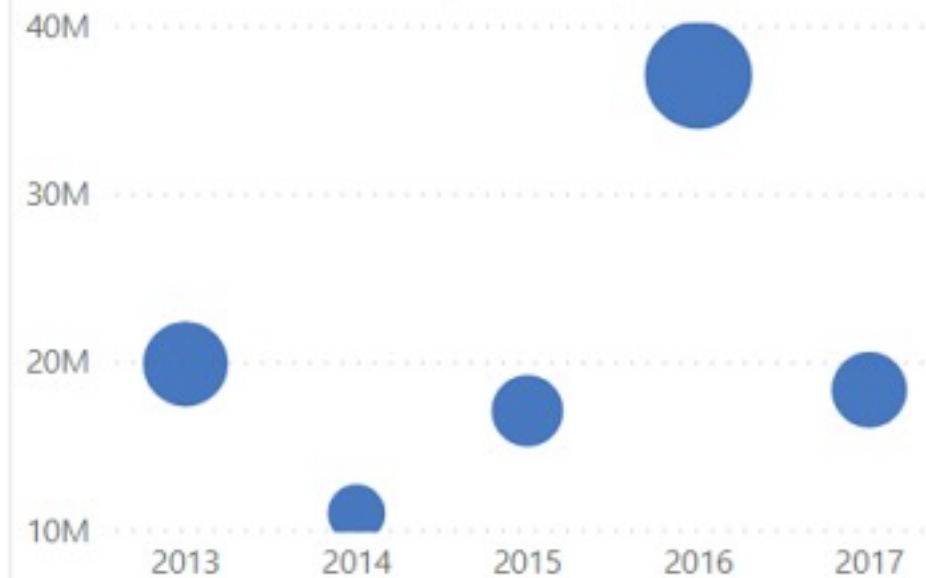
Loans by Year and Duration (in Months)



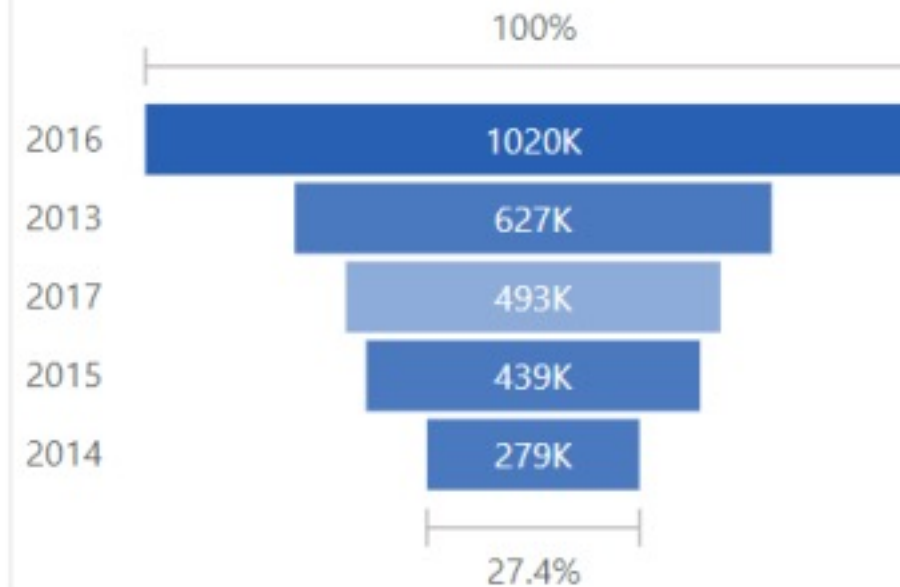
12 Months Amount and Payments Trend



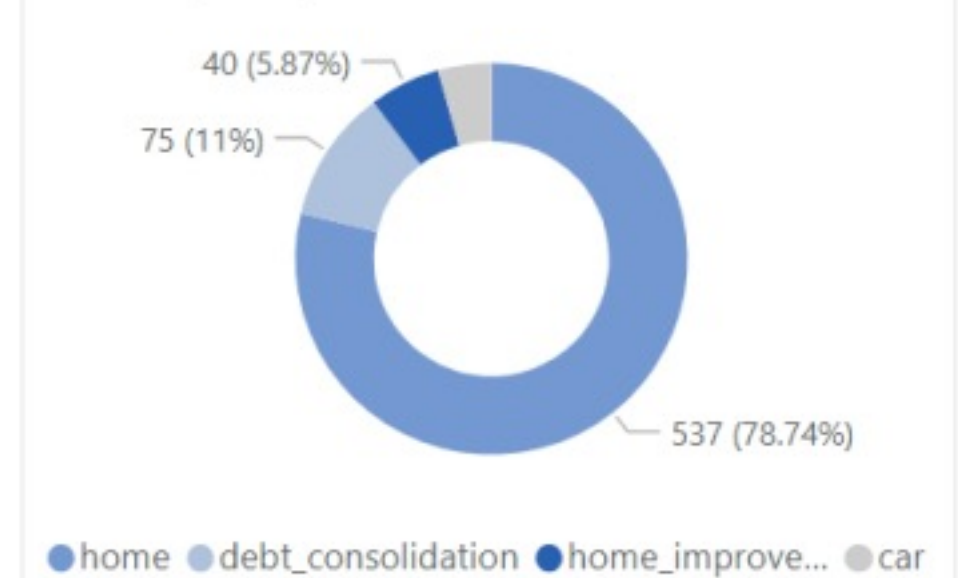
Loan Amount and Payments by Year



Payments by Year



Loans by Purpose



Create an image of a 55 year old man with a white beard and short mustache and mischievous smile riding an orange Harley bagger through curvy mountain roads wearing a black leather jacket, sunglasses, and half helmet with the Harley Davidson logo on them.



GPT – Generative Predictive Text

- Automation
- Human replacement?
 - willrobotstakemyjob.com
- Hallucinations
- Adapt
- Safeguards
- Align Values
- 100% Human Generated Content

GPT – Generative Predictive Text

- The Good and the Bad
 - Knowledge
 - Sift through Data
 - Deal with skills shortages
 - Create flawless emails
 - Appear as a native speaker
 - Social media profile
 - Show bias
 - Disseminate propaganda
 - Collect Data

Adoption of AI

- Shadow IT
- Innovation and use cases
- Internal implementations vs Free Web versions
- Microsoft Copilot
 - Bound by the tenant
 - Follows your account security
 - Follows your Data Governance

Data Governance

The screenshot shows the Office 365 Delve interface. At the top is a blue navigation bar with the Office 365 logo and links to Outlook, Calendar, People, OneDrive, Delve, Yammer, and a user profile for Amanda. Below the navigation bar is a search bar with the placeholder text "search content and people...". To the left of the search bar are three navigation options: Home, My work, and Shared with me. Below these are the "PEOPLE" section, which lists several users with their profile pictures: Chris Magnuson, Ron Chitwood, Sarah Talley, Milton Dominguez, and Ashley Frye. The main area of the interface is a grid of document cards. Each card displays the author's name and profile picture, the document title, a thumbnail image, the document type (PowerPoint), the location (e.g., "Ashley Frye's OneDrive"), and the number of views. The cards shown are: "Northwind & Contoso Proposal" (261 views), "Marketing - Professional Development" (141 views), "Employee Handbook - Updates" (208 views), "Northwind Partnership" (104 views), "Tablet Renewal Orders" (175 views), and "Future Scenarios Weekly Sync" (245 views). Annotations on the left side of the image point to specific features: "Type to search" points to the search bar; "Click to see a different view" points to the Home, My work, and Shared with me options; "Click a name or picture to go to a person's page" points to the user list; and "Click a card to open the document in Office Online" points to a document card.

Office 365

Outlook Calendar People OneDrive Delve Yammer Amanda

Type to search search content and people...

Click to see a different view Home My work Shared with me

Click a name or picture to go to a person's page

Click a card to open the document in Office Online

PEOPLE

Chris Magnuson Ron Chitwood Sarah Talley Milton Dominguez Ashley Frye

Delve

Milton Dominguez Modified 2 hours ago

Northwind & Contoso Proposal

PowerPoint Ashley Frye's OneDrive 261 views

Sarah Talley Modified 2 hours ago

Marketing - Professional Development

PowerPoint Ashley Frye's OneDrive 141 views

23 of your colleagues viewed this recently

Tablet Renewal Orders

PowerPoint Dane Seale's OneDrive 175 views

26 of your colleagues viewed this recently

Phased Deployment Plans

Amanda Cunningham Modified Sep 7, 2013

Employee Handbook - Updates

Word Dane Seale's OneDrive 208 views

Amanda Cunningham Modified Oct 2, 2013

Future Scenarios Weekly Sync

PowerPoint Contoso Public Folder 245 views

The AI Questions

- What does AI Policy development look like? What is a good AI policy?
- How do you do a thorough risk assessment on the use of AI?
- How do we foster innovation of using AI without losing control?
- How to keep AI from being a free for all within each business unit?
- AI enriches information with Web Searches. Can that info be used to contextualize what someone was doing or the PII I'm protecting?
- Especially in the free versions of GPTs, we worry about erroneous inputs changing what the AI believes.

Some AI Suggestions

- Use commercial versions of AI
 - Copilot follows the Privacy and Data Governance
 - It is integrated into the current tools
 - Provides a way for the IT Department to manage AI
 - Lives within your tenant's data
- Don't find the use case, instead find a pilot group
- Discuss together what people have discovered
- Push it out as it is adopted – start small and iterate
- Don't be all about the ROI, but find the ROI after adoption

Thank You



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