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# Enhancing Futurice blogs with GenAI

# Agenda

01

Problem

02

Our solution

03

Data analysis  
& insights

04

Demo

# Team - Data Science BSc'24



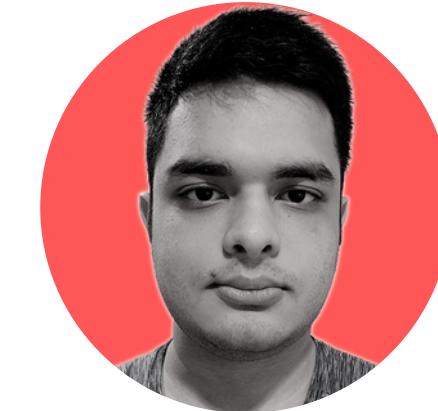
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Lassi Malvikko

# Introduction

- Blogs are important mediums for **sales, marketing**, and **talent acquisition**.
- Shows what kind of projects the company is working on, and **what they value** and want to highlight about themselves.
- Increases brand awareness and visibility, gaining leads that might turn into sales, showcasing **company culture** to attract talents, and sharing company news.
- Futurice has written over 800 blogs in the past 10 years. We would like to better understand our blogs such that we can create better, more engaging content in the future.

# The Problem

## Writing Challenges

- Crafting engaging, relevant, and well-timed blogs is challenging.
- Predicting blog success before publication is difficult.

# The Problem

## Writing Challenges

- Crafting engaging, relevant, and well-timed blogs is challenging.
- Predicting blog success before publication is difficult.

## Topic Selection Methods

- The current reliance on external SEO analysis offers a general rather than a client-specific view.
- Interviews with the sales team provide insights, but these are often subjective and vary by individual.

# Research questions

1. What are the most popular words over a period of time?
2. What kind of blogs seem to be the most popular/ highly engaging?
3. How do our blogs compare to that of our competitors and clients?
4. Are there any correlations between the metrics from Google Analytics (page views, time on page, etc) and blog characteristics (length, frequent words, categories)?
5. Can we predict a blog's success before it's published?
6. Given the development of Generative AI, is it possible to automate blogs?

# Our goals

- Analyze past blog posts and relevant data to gain a broader understanding and context.
- Discover trends and patterns in historical data to inform and inspire future blogging strategies.
- Improve existing topic selection methods by validating assumptions and identifying new, subtle trends.
- Implement a data science solution to examine blog data from various perspectives, leading to better-informed decisions for upcoming blogs.

# Our goals

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=> Transform Blog Writing into an Engaging and Enjoyable Experience

# The Purpose of the Tool

- Help with writer's block
- Gain inspiration from similar blogs
- Give indications of the possible success of the blog
- Not to replace humans, but to make blog-writing more enjoyable and quicker
- Decided to use streamlit as a proof-of-concept

# Solution - AI-powered blog editor

Choose page

Blog editor

Remember to save textfields before changing pages!

## AI-powered blog editor

### Blog editor

Blog title  
Metaverse in high school education

Write a description of the target audience  
High school students and teachers who are interested in technology

Intro Paragraph

0 characters

Blog body text

Suggestions   Tips   Insights

Would you like to modify intro?

Make the intro shorter, it should be only 2 sentences.

Update intro

## The Metaverse: Revolutionizing High School Education

Imagine a virtual space where people meet, work, and play. Now, what if this digital realm could revolutionize traditional education methods? In this blog post, we explore how the Metaverse could enhance high school education, providing an immersive learning experience.

Would you like to modify blog body text?

Update blog body

### Virtual Field Trips  
One of the most significant advantages of the Metaverse in education is the ability to conduct virtual field trips. Students can visit historical sites, scientific laboratories, and other locations around the world without leaving their classrooms. This not only saves time and resources but also provides a more immersive and interactive learning experience.

### Collaborative Projects  
The Metaverse also provides unique opportunities for students to collaborate and work together on projects. They can share ideas, discuss concepts, and even work on assignments simultaneously, regardless of their physical location. This fosters teamwork, communication skills, and critical thinking.

#### Benefits of Collaborative Projects

- Encourages teamwork and social interaction
- Develops communication skills
- Enhances critical thinking and problem-solving abilities

### Individualized Learning  
In addition to collaborative projects, the Metaverse can also enable individualized learning. Students can access personalized learning paths based on their interests, strengths, and weaknesses. They can receive instant feedback and adjust their learning pace as needed, making education more efficient and effective.

# What data we have collected

512 Futurice blogs  
en - us  
(2010 - 2023)

◀ [Back to Insights](#)

## The Futurice blog

Eager to learn something new? You've come to the right place.

Filter blog posts



30 Oct 2023 | STRATEGY  
**Unlocking the Potential of Generative AI: Business Strategies and Insights**

This blog post and accompanying downloadable working paper open up what we've learned and guide you forward on your Generative AI journey.



11 Oct 2023 | EVENTS  
**IAA Mobility 2023: Trends in automotive digital transformation**

Explore key trends from IAA Mobility 2023, from electric vehicles to software-driven solutions, and their impact on the future of the automotive industry.



28 Sept 2023 | TECHNOLOGY  
**EV charging apps – function, frustration and shifting priorities**

Charging apps get mixed reviews from EV drivers who face technical issues, inaccurate info, and for some, underwhelming CX. As EV adoption grows, charging companies have choices to make about improving digital offerings vs investing in infrastructure.

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Competitors

606 Tietoevry blogs

403 Accenture blogs

◀ [Back to Insights](#)

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30 Oct 2023 | STRATEGY  
Unlocking the Potential of  
Generative AI: Business  
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This blog post and accompanying  
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we've learned and guide you forward on  
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11 Oct 2023 | EVENTS  
IAA Mobility 2023: Trends in  
automotive digital  
transformation

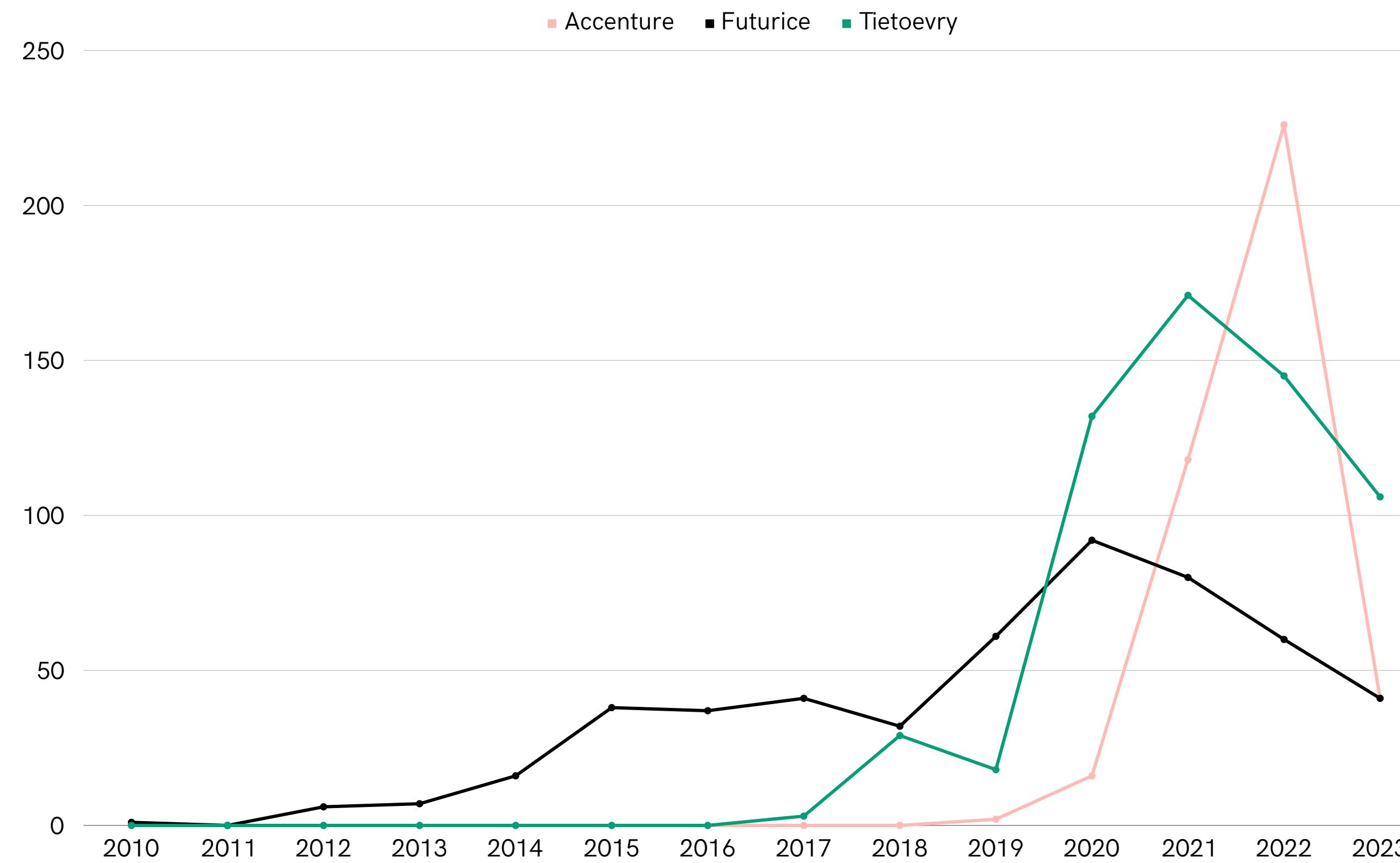
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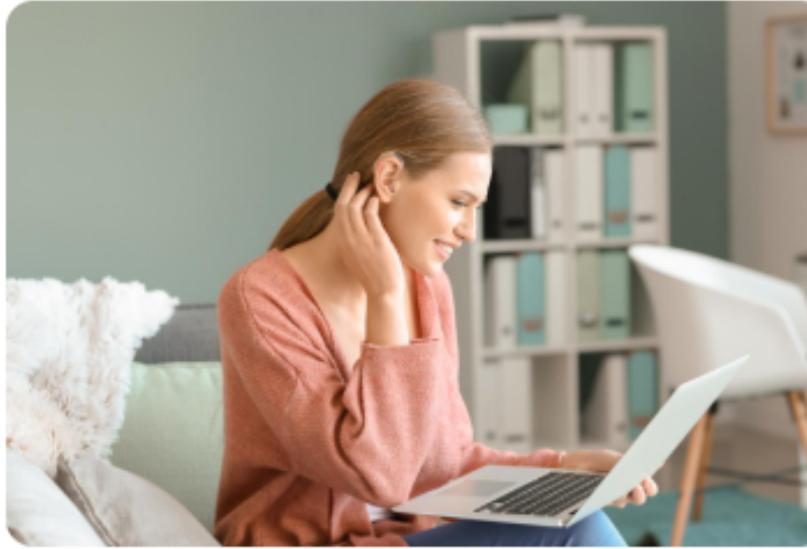
# Publicly accessible English-language blogs by Futurice, Accenture and Tietoevry (per year)



# Enhancing Futurice Blogs



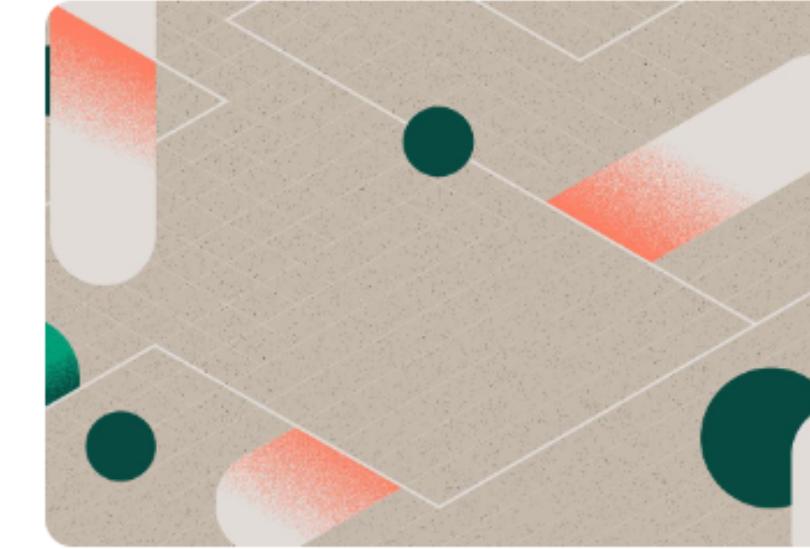
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27 Sept 2023 | STRATEGY

## Digital accessibility, more than an audit

Discover how to create an accessibility strategy that goes beyond compliance and opens doors to a wider audience and fosters innovation.



5 Sept 2023 | TECHNOLOGY

## DesignOps - Small team starter guide

DesignOps is a powerful framework that works for small teams too. Get practical guidance on: clarifying your org model, defining processes, standardizing tools, building sources of truth, and nurturing transparency.



30 Aug 2023 | STRATEGY

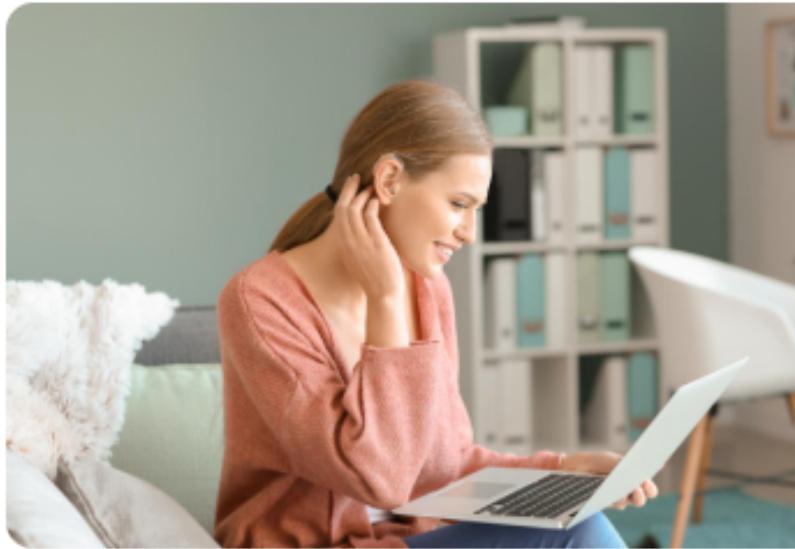
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Digital accessibility is soon to be mandatory for private actors. Banking, transport and e-commerce are a few industries affected. Learn more about who's affected and what's expected.

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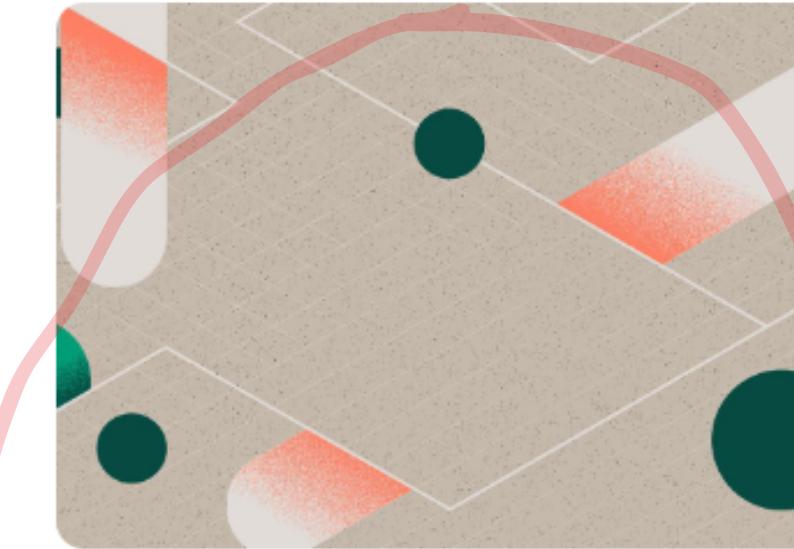
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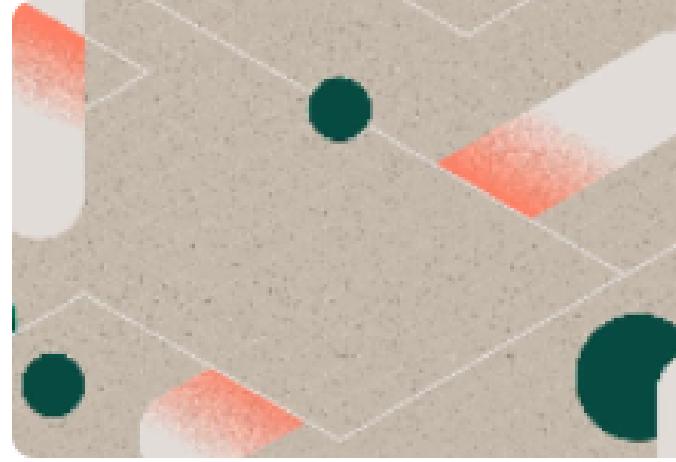
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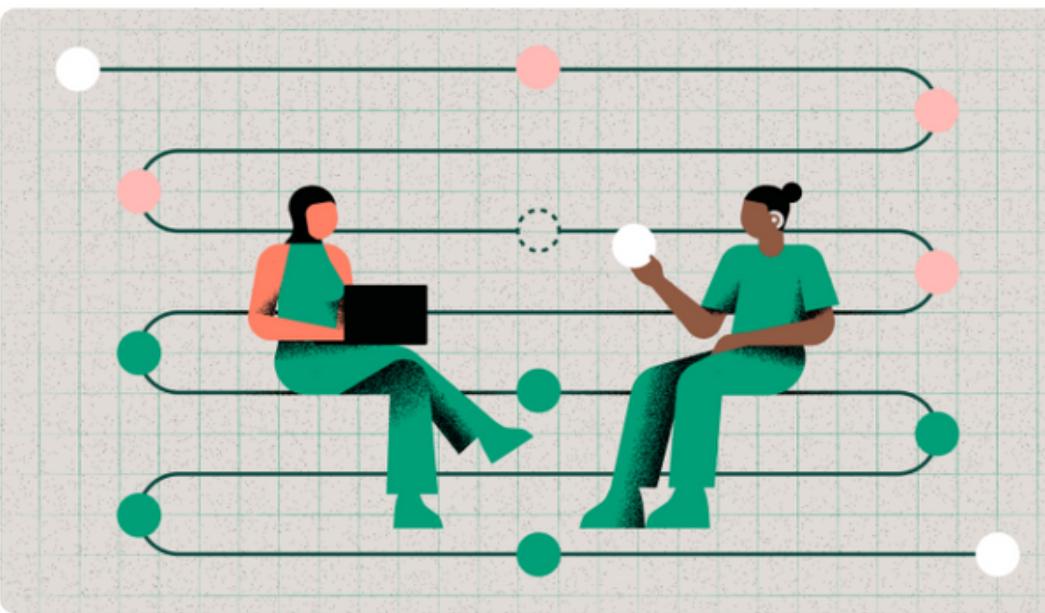
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# Enhancing Futurice Blogs

## Clarify your organisational model



At a high level, an organisational model is a structure for how your design team collaborates with other disciplines, and how reporting is managed. The best organisational model for you will depend on factors such as the size of your team, the capabilities within your team, and how product focused your organisation aspires to be.

There's no one-size fits all organisational model that's perfect for every team, but NN/g has created a really comprehensive [guide to different organisational models for design teams](#), which outlines the pros and cons of the three most common models.

### Centralised

This is the traditional 'Studio' style approach to organising a design team, with designers reporting into a Design Leader. Designers are dropped into different Product teams as and when design is needed.

- **Key Benefits:** The benefits for this model are that transparency is high amongst team members, and that designer's get to work on the widest variety of work.
- **Key Challenges:** The challenges of this model is that Design ends up being separate from Product making it difficult to integrate a UX mindset into Product Teams, and preventing designers from getting fully immersed into specific Products, thus limiting the opportunity to gain deeper understanding of the Product's vision.

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Title	Date	Keywords	Keyphrases	Popular Words
DesignOps - Small team starter guide	05.09.2023	[designops, organisation, team, ...]	[team designops, design teams, ...]	[(team, 89), (design, 79), ...]
Navigating the European Accessibility Act	30.08.2023	[accessibility, disability, ...]	[european accessibility, provide accessibility, digital accessibility, ...]	[(accessibility, 23), (sevice, 20), (product, 16), ...]
Practical tips for facilitating high...	21.08.2023	[meeting, manage, ...]	[data managing, strategic data, strategic discussion, ...]	[(decision, 40), (group, 22), ...]

# Data Analysis and Insights

# Methods



## Data mining

Discovering patterns and valuable information

- Extract features
- Plot features

## Basic ML approaches

Validating findings in previous step

- Linear regression
- Random Forest
- Clustering
- Analysis of basic statistical metrics

## Leveraging LLMs

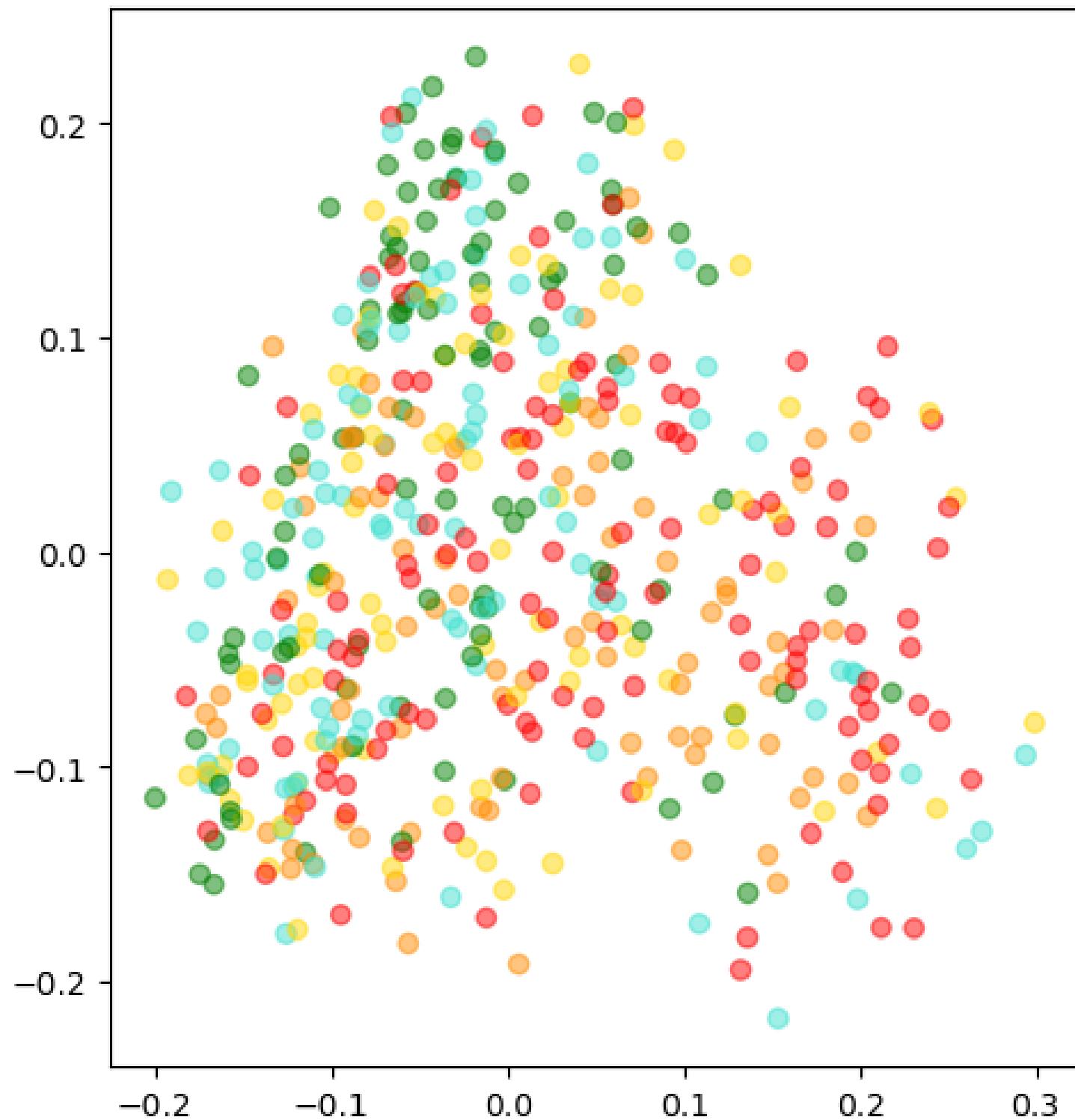
Settled with this since it worked best with text data

- Similarity
- Generation
- Prompt Engineering
- LangChain
- RAG

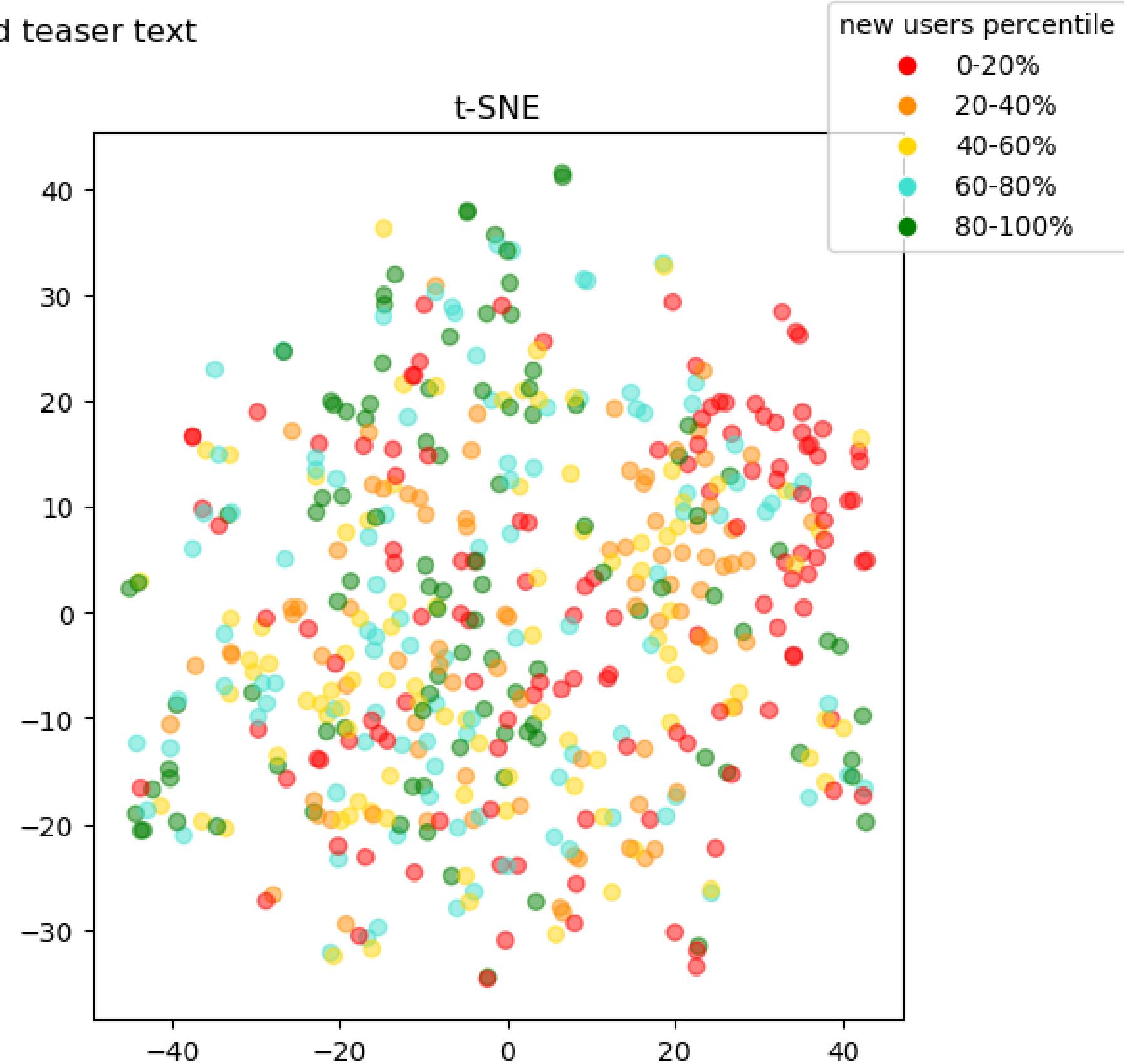
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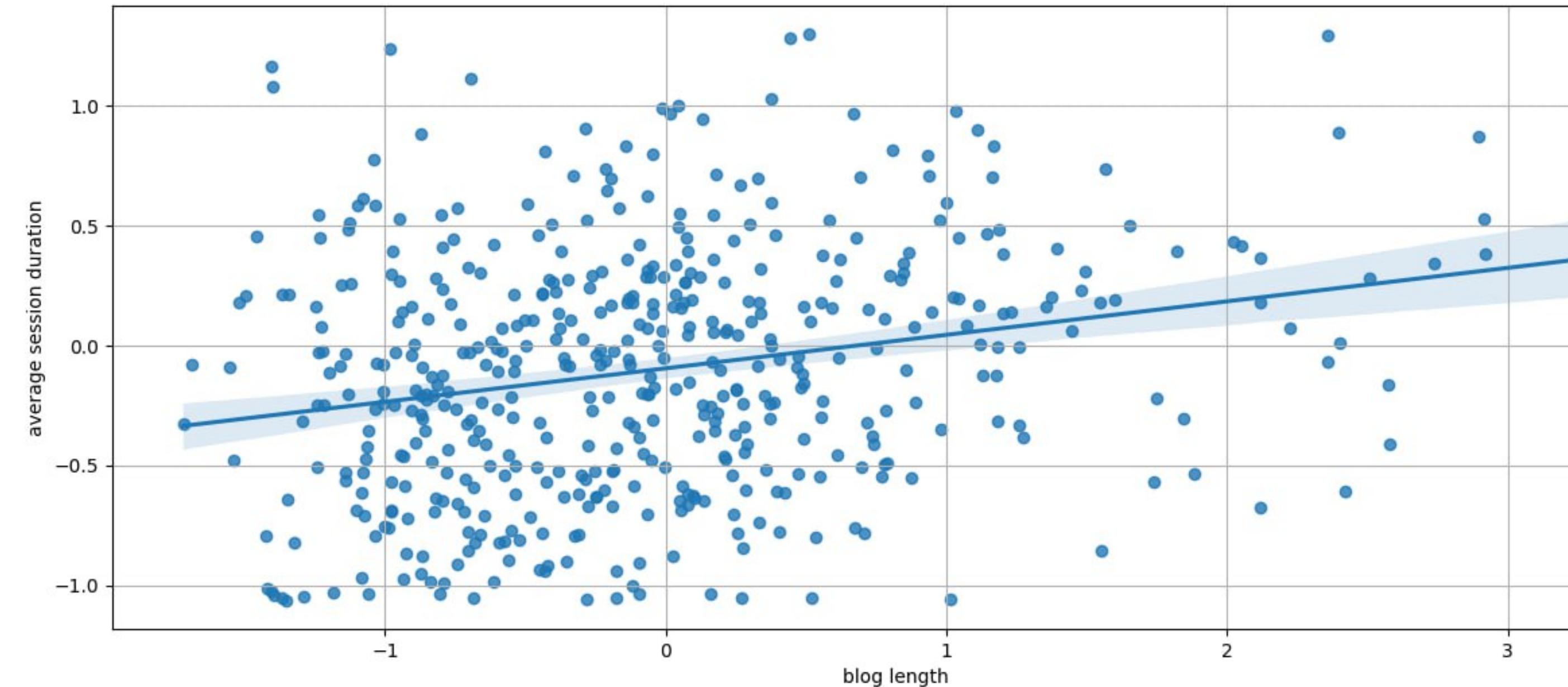
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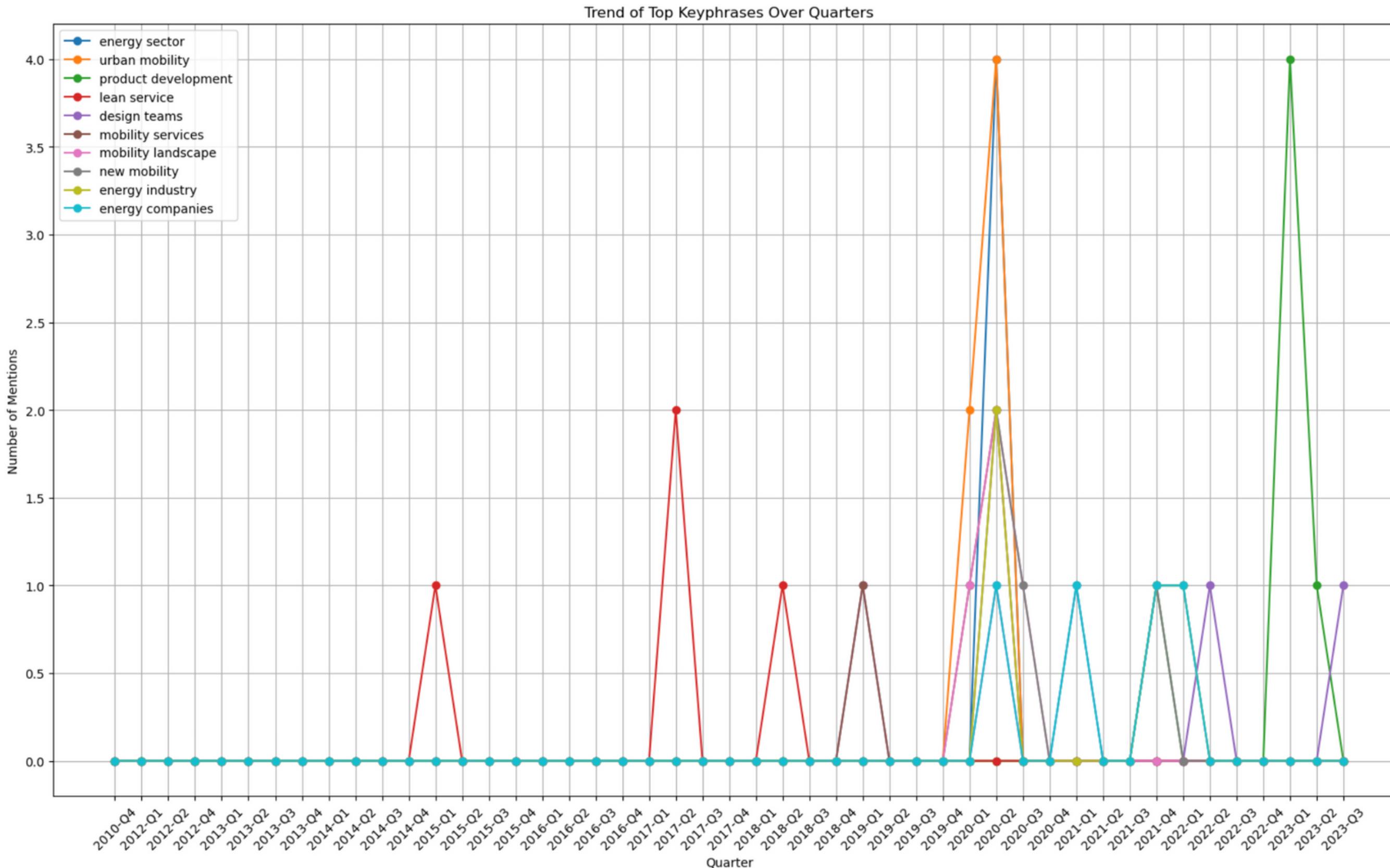
new users percentile

- 0-20%
- 20-40%
- 40-60%
- 60-80%
- 80-100%

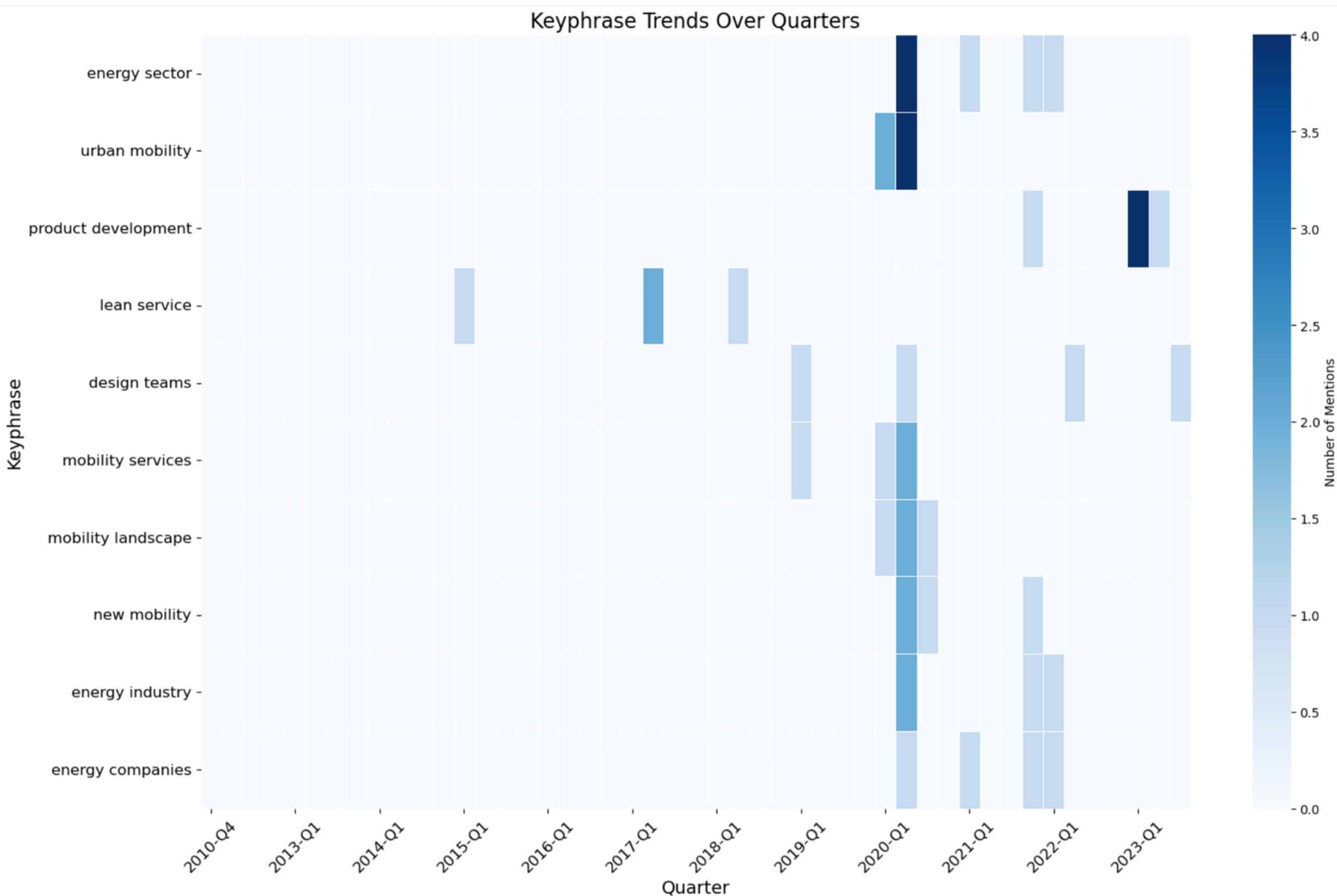
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# Keywords & Trends



# Keywords & Trends

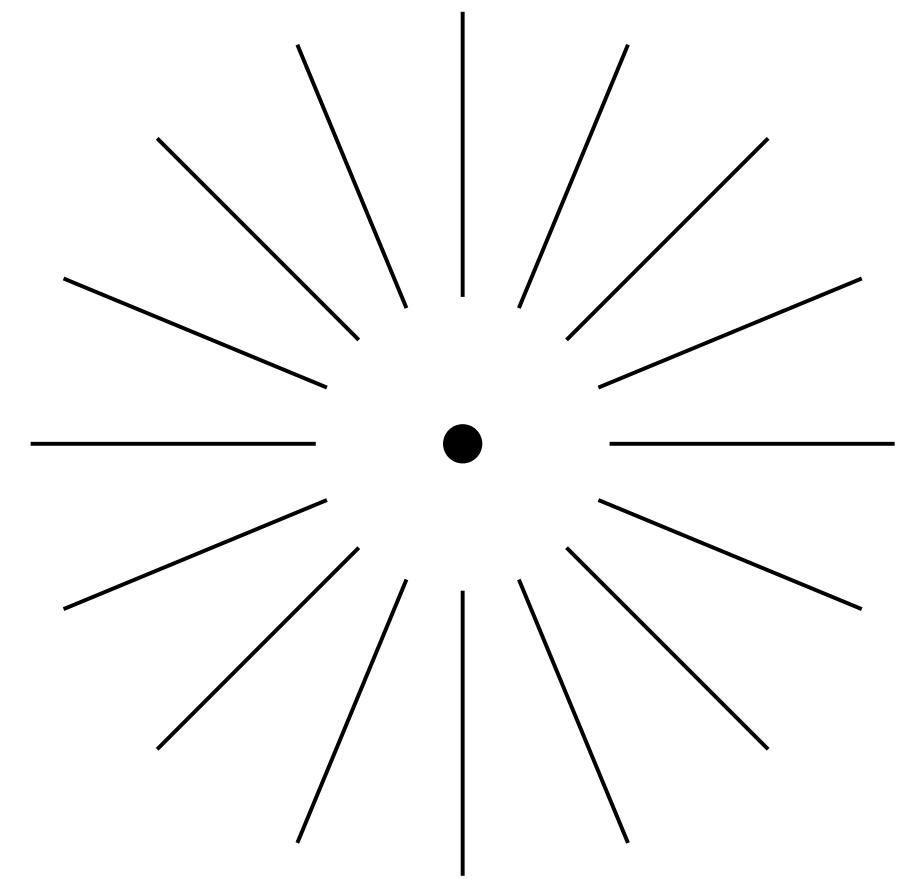


# Keywords & Trends

Observing the two graphs, we can see the following trends:

- Emerging Trends: "Product Development", "Design Teams"
- Consistent Themes: "Energy Sector", "Energy Industry", "Energy Companies"
- Variable Popularity: "Urban Mobility", "New Mobility"
- Short-lived Highlights: "Lean Service", "Mobility Services"

# Demo



# Lessons learned

## **It's hard to come up with actionable tips**

Data analysis alone doesn't bring value, we needed to use LLMs to show what's important

## **8 people is a big team**

It took a while to find a working process due to no one having experience in PO/PM role, but we managed

## **Tech advances faster than we build tools**

On 6 Nov OpenAI released GPTs, along with other new features, which made some of our work obsolete already

# Thank you!

Barnik Brata

Hoang Nam Bui

Eero Liimatainen

Lassi Malvikko

Hiep Nguyen

Darijus Šeporaitis

Lam Tran

Ilia Zalesskii

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