# Platform Engineering

Improving time-to-business value with developer experience (DX)



#### Catherine Weilaender

Senior Product Manager at GitHub for Platforms' Delivery org

Prev. Founder of software agency 7+ years



- What
- Why
- How
- Example

What is platform engineering?

01

# It's [designing] Super Mario levels for the enterprise. That's the definition.

- Luca Galante, Humanitec & Platform Weekly



Take tools and paths of an organisation

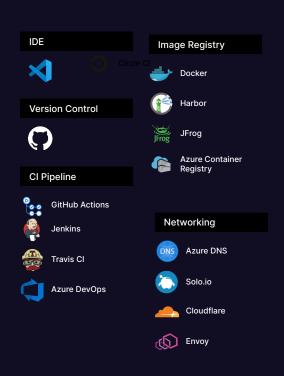
to develop a paved path

enabling self-service

to achieve security, compliance, cost and time-to-business value

#### Moving away from "you build it you run it"

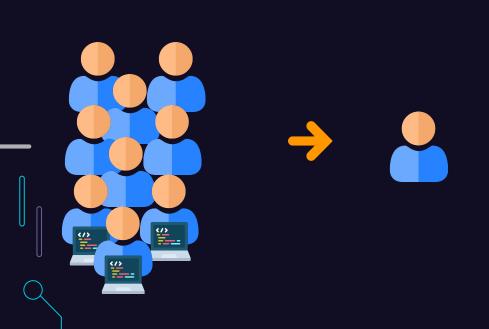


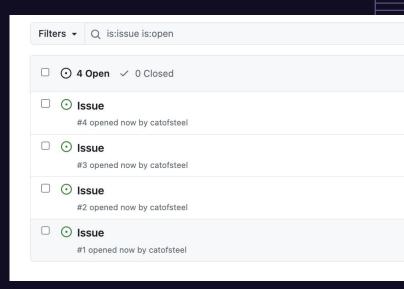






# Moving away from ops-teams == bottleneck





#### Towards an opinionated paved path





# Stakeholders



# > Stakeholder: Engineers



Challenge

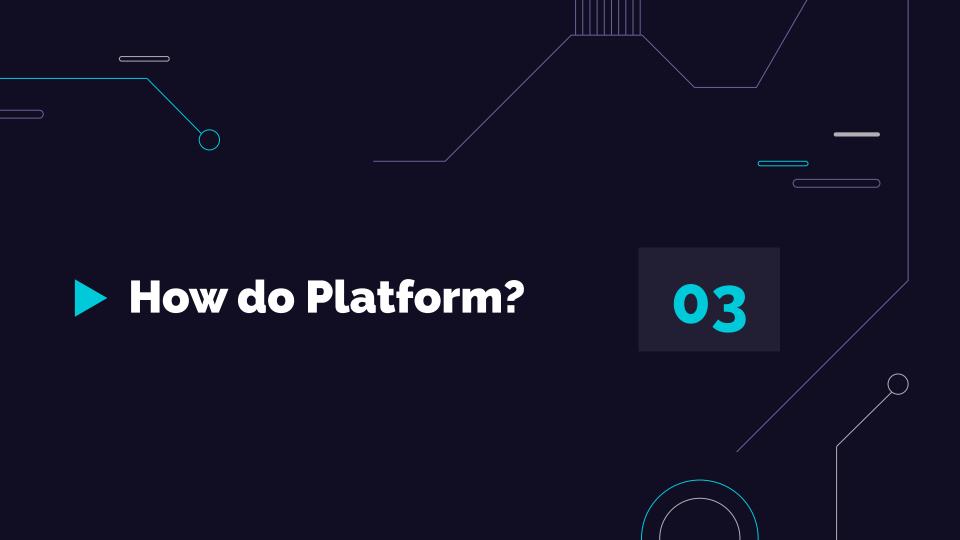
**Building a platform that is** 

#### opinionated and secure

to safely scale, but

### flexible enough

to serve individual engineering team requirements



# "A platform is a curated experience for engineers (the customers of the platform)"

- Manuel Pais, Co-author of Team Topologies

#### What do we need? (discovery)

#### Talking to customers



Find representative ressources & paths

#### Minimum viable Platform (MVP)

Find repeatable E2E workflows from IDP to orchestrator

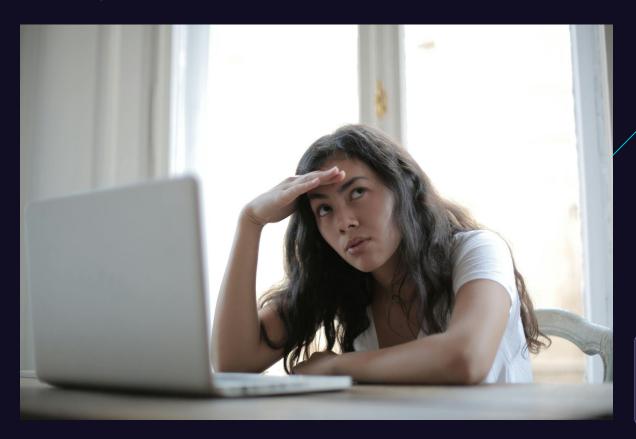


# Mature and grow (iterative)

- Communicate
- Iterate
- Scale



# Why Platform Engineering fails



Case Study: GitHub
Communicating Fundamentals'
Requirements

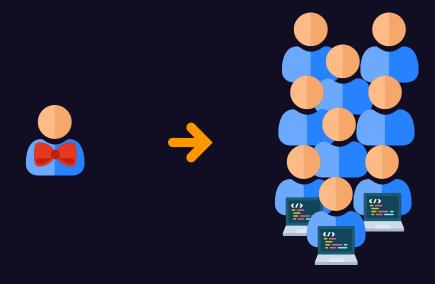
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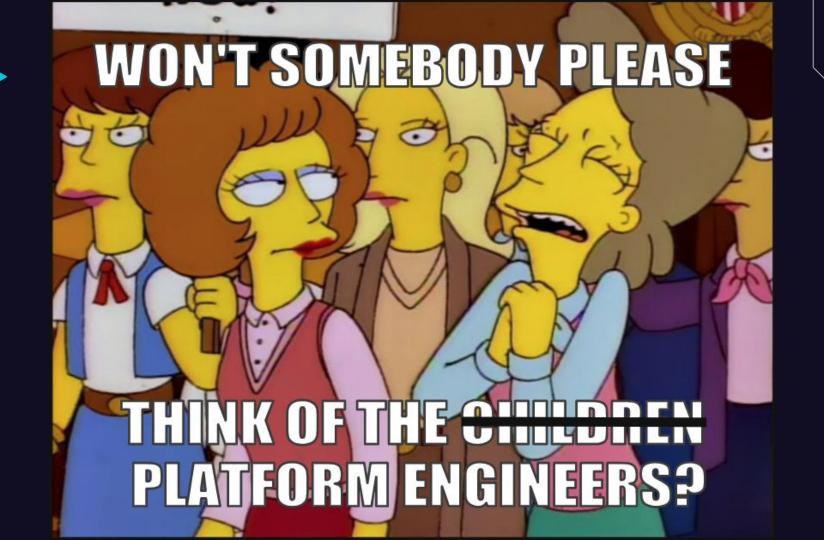
**▶** Fundamentals

Goal:

[GitHub] is always available, secure, and accessible

# Communicate requirements





# Service Catalog = Inventory



#### Scorecards



#### Scorecards for services

Tier 1 Services Out of Compliance [Count: 2]				
Service Name	Service Tier	Unmet <mark>Scorecard</mark>	Exec Sponsor	Team
service_a	1	incident- readiness	john_doe	github/team_a
service_x	1	code- scanning	jane_doe	github/team_x

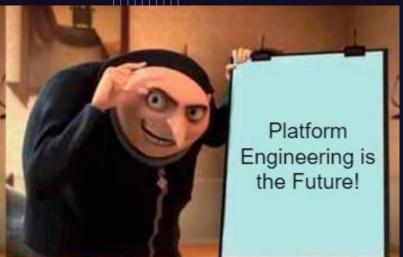
# Self-service Fundamentals process













# **THANK YOU**

# Product Flywheel

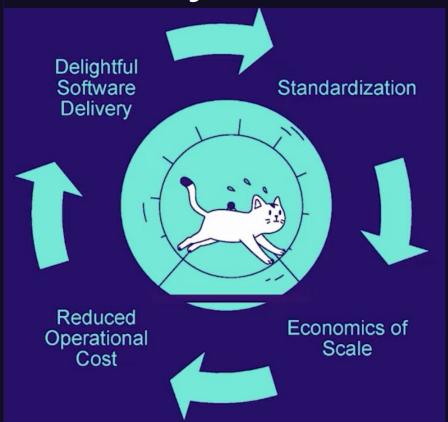


Image by: Jon Skarpeteig, Signicat

#### Service Catalog

Inventory of all services

ownership mapping based off <a href="https://ownership.yaml">ownership.yaml</a> in repo.

**▶** What do we know?

???

#### **CODEOWNERS**

Monolith CODEOWNERS file→ inventory

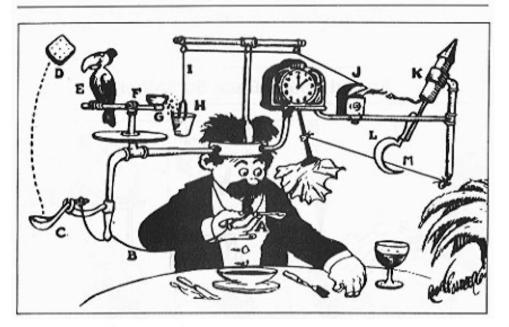
# **► CODEOWNERS**

Engineer creates file with <a href="Sericeowner">Sericeowner</a>

→ Sericeowner Ruby gem → CODEOWNERS → inventory

Enforced in CI

#### Self-Operating Napkin



Platforms build without good product discipline frequently devolve into leaky abstractions

**▶** Challenge II

# **ENABLE**

VS.

# RESTRICT

VS.

balance?



# Stakeholders

- C-levels
- Fundamentals Program
- Fundamentals champions
- Engineers, Application teams
- Security

# Example catalog

# **Measure**

- Deployment frequency (DF): how frequently an organization releases new software
- Lead time for changes (LT): the time taken from when a change is requested or initiated to when it is deployed
- Mean time to recovery (MTTR): the average time it takes to recover from a failure
- Change failure rate (CFR): the percentage of changes that result in a failure

# ► CONTENTS OF THIS TEMPLATE

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<u>FONTS</u>	To view this template correctly in PowerPoint, download and install the fonts we used
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THANKS SLIDE	You must keep it so that proper credits for our design are given
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**FINANCIAL & METRICS** 

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# Mature and grow (iterative)

#### What do we need?

- Collaborate with internal customers
- Find representative ressources

Communicate / Marketing / visuaize so people know sth and they dont build it themselves

Address cross-functional needs (business SLAs SLOs, GDPR and compliance)

Make use of what the industry is using - this changes Evolve the capabilities they use



# ► INTRODUCTION



#### **OUR COMPANY**

The introduction of your company in the pitch deck should include a brief overview of who you are and what you do. It should also include a brief description of why your product or service is unique and the value it provides to customers



#### **OUR IDEA**

The "our idea" part of a pitch deck should include an explanation of your product/service, how it works, and what the customer value is. You should also explain the market opportunity for your product/service

# MAIN IDEAS OF A PITCH DECK



#### **PRESENTATION**

A great presentation for a pitch deck should be concise, clear and easy to understand. Visual elements such as charts, graphs, images, and videos can help to make the presentation engaging



#### **INVESTORS**

When it comes to picking investors for a pitch deck, it's important to research potential investors and understand their preferences, goals and interests



#### **VALUE**

The value of a product is determined by how much customers are willing to pay for it. It's a combination of factors, including the quality of the product, its features, and how well it meets customer needs

# KEY IDEAS IN MARKET OPPORTUNITY



#### **RESEARCH NEW MARKETS**

Analyze existing customer needs and identify gaps in the market to find new opportunities



#### **STAY AHEAD OF TRENDS**

Monitor changes in the marketplace, such as shifts in consumer behavior or emerging technologies, to stay competitive and capitalize on new opportunities and trends



#### **INNOVATIVE SOLUTIONS**

Utilize technology and customer feedback to come up with novel solutions that meet your customer's demands or needs



#### **SEASONAL SPIKES**

Identify times of year when demand for certain products may spike, such as holidays or special occasions, and use these times to target customers or maximize sales

# ► SIX RECOMMENDATIONS



#### **KEEP IT SIMPLE**

Structure your pitch deck clearly and make sure all the important points are easy to understand



#### **LET'S MAKE IT**

Include impactful stories, statistics, or facts that will help your audience remember your message afterwards



#### **USE VISUALS**

Incorporate visuals or graphics to illustrate your message and keep the audience engaged



#### **TEST & ITERATE**

Practice presenting your deck beforehand with friends or colleagues for feedback, then use this input to refine it further



#### **KEEP IT SHORT**

A good pitch deck should be concise and clear; avoid trying to cram in too much information



#### MAIN POINTS

A pitch deck is an overview of your business; focus on key points that get the most important ideas across



Users bought our product

▶ 9h 55m 23s
▶ 386,000 km

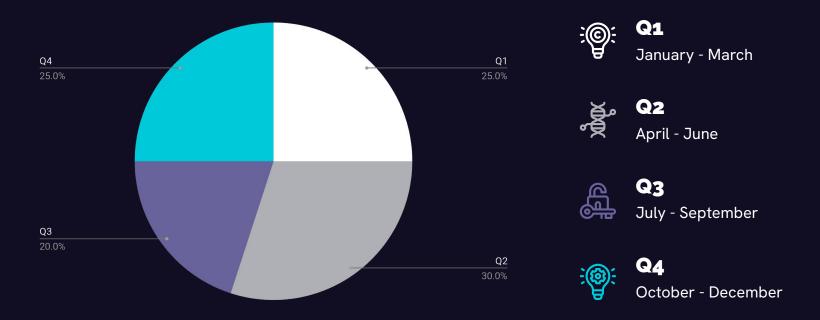
Estimated delivery time per unit

Avg. distance travelled by logistics team

# **4,498,300,000**

Number of users analyzed in our market research

# ► REVENUE BY QUARTER



Follow the link in the graph to modify its data and then paste the new one here. For more info, click here

# **COMPETITION COMPARISON**

	FEATURES	VALUE	PRICING	TRIAL	COMPETENCE	SHARE
Company A	Fuel economy	Special offers	\$23,000	No	Low	8%
Company B	Design	Reliability	\$27,000	No	Low	5%
Company C	Performance	Repairs	\$30,000	Yes	High	20%
Company D	Safety features	Marketing	\$24,000	No	High	22%
Company E	Technology	Customers	\$32,000	Yes	Low	10%
Company F	Comfort	Best prices	\$15,000	Yes	High	30%
Company G	Customization	Brand name	\$45,000	No	Low	5%

# ► PRODUCT INFOGRAPHIC

# VISUALS Showcase the design of your product



Share the cost and price with investors

#### **AVAILABILITY**

When will the product be ready?





#### **FEATURES**

What makes your product unique?



#### **USERS**

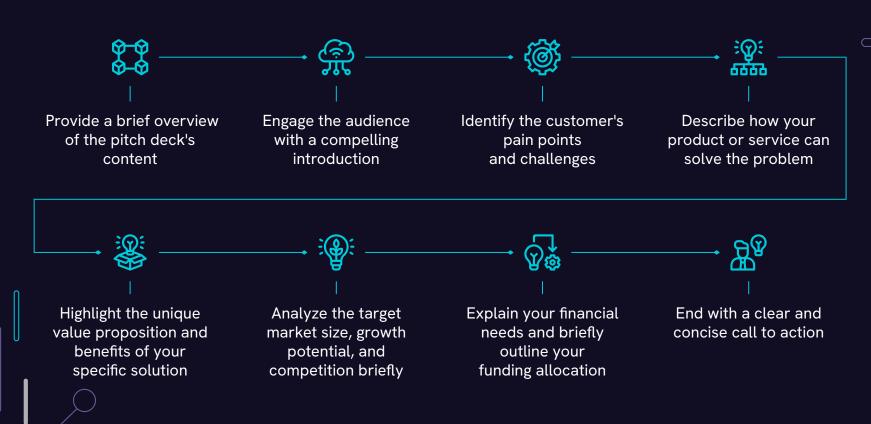
Speak about the target audience



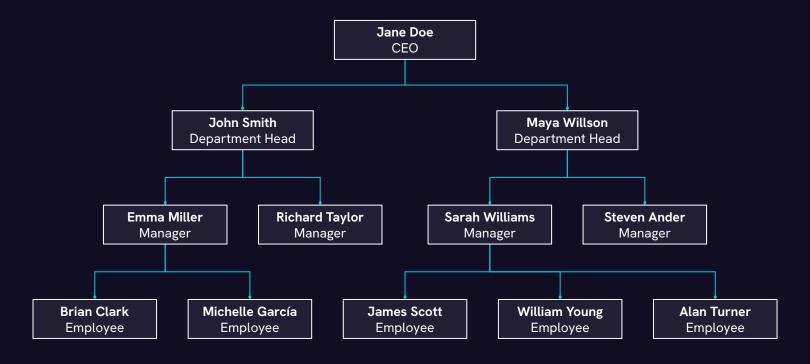
#### **UPDATES**

Do you plan on updating it?

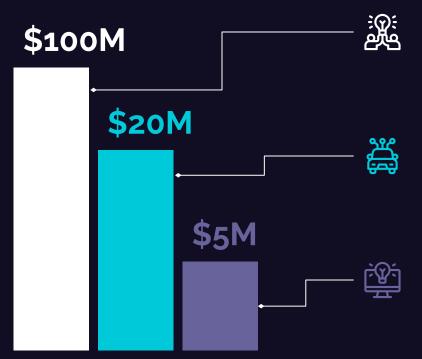
# TIMELINE OF YOUR PRESENTATION



# ► ORGANIZATIONAL CHART



### ► MARKET SIZE OVERVIEW



#### **OUTER CIRCLE**

Include the total size of the market, which represents the entire potential customer base for the product or service

#### MIDDLE CIRCLE

Identify the target market for the product or service, which may be a subset of the total market. This could be based on factors such as demographics, geography, or specific needs

#### **INNER CIRCLE**

Indicate the current market size, which represents the portion of the target market that the company has successfully captured

# ► ROADMAP INFOGRAPHIC

INITIATIVE	OBJECTIVE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	ост	NOV	DEC
Understanding	Analyze and understand the needs of your target audience												
Conduct research	Research existing products in the industry and analyze them												
Brainstorm ideas	Generate ideas based on user feedback and research findings												
Develop a prototype	Create a basic version of the product to show investors												
Test for usability	Put the prototype through rigorous testing processes												
Analyze feedback	Analyze feedback												



# **KPI DASHBOARD**

PRODUCT	UNITS	REVENUE	RETURNS
Item 1	500	2,000,000	40
Item 2	1,000	50,750	10
Item 3	250	1,500,000	300
Item 4	500	2,000,000	40
Item 5	1,000	50,750	10
Item 6	250	1,500,000	300
Item 7	500	2,000,000	40
Item 8	1,000	50,750	10



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# THANKS!

Do you have any questions? youremail@freepik.com +34 654 321 432 yourwebsite.com



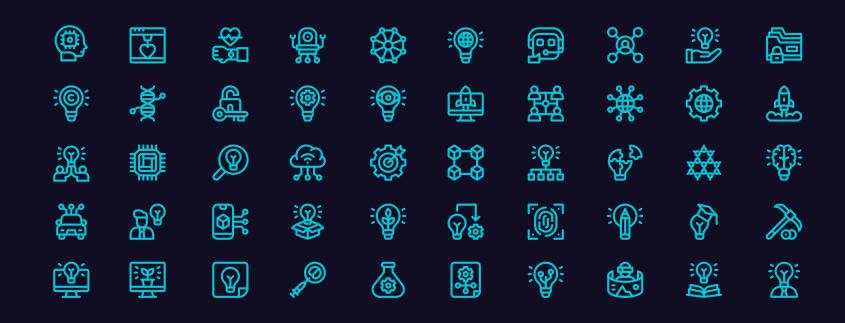




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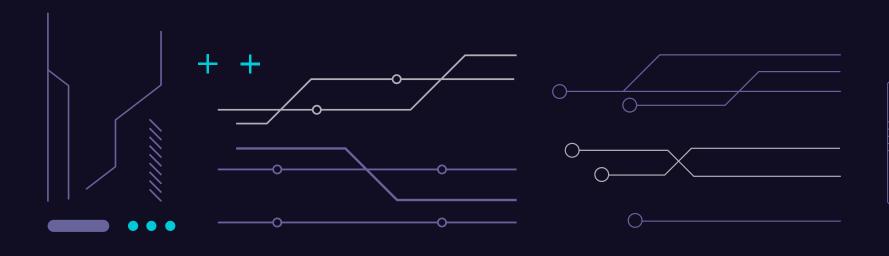
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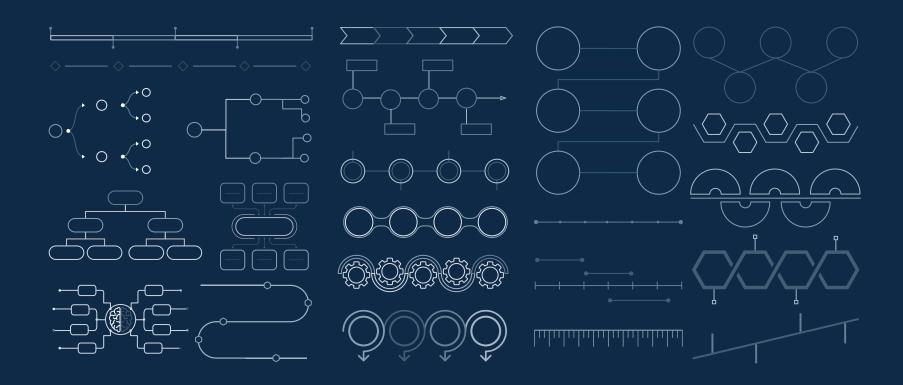
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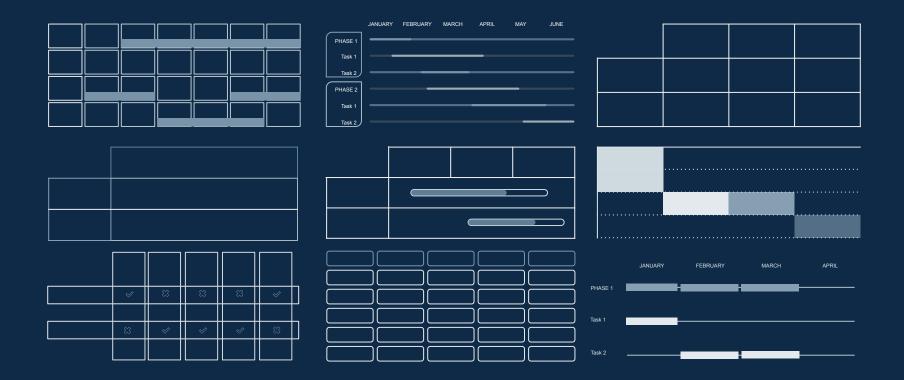
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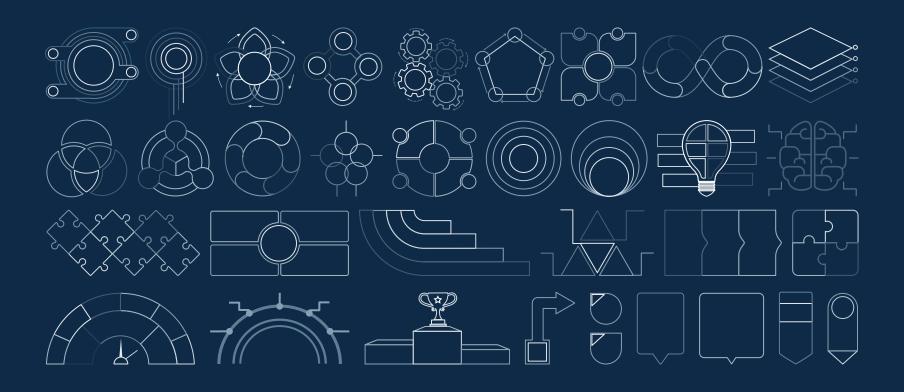
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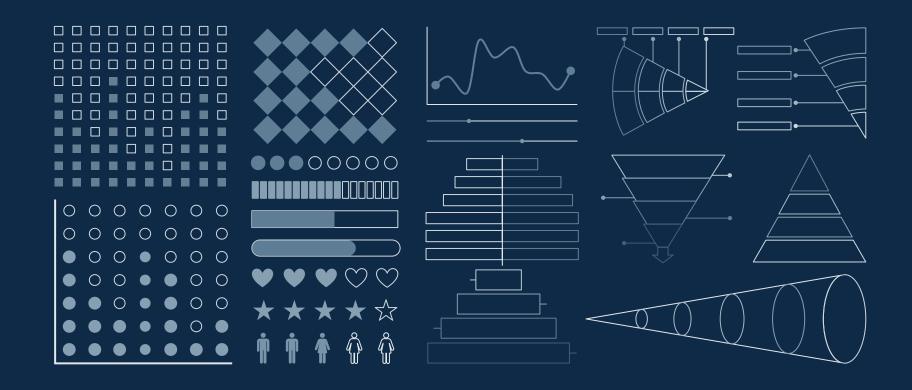












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# **阿阿姆金路盆** &

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