



A data-driven approach to Product Discovery

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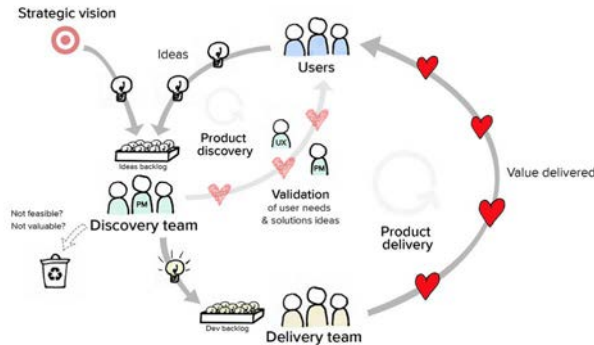
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How to use data in product discovery

Data drives product discovery

- Product discovery is a decision making process. It requires data as inputs to make informed decision
- Data is abundant. It's critical for product teams to identify what data is important



*“Product discovery involves identifying **key problems** and their **optimal solutions** to achieve **desired outcomes**”*

Source: [Kevin on Code](#) / [Productboard](#)

Prioritisation: A top-down approach

- Business outcomes are lagging indicators.
 - Once you are able to measure it, it is often too late to do anything about it

“Good discovery starts with a clear desired outcome”

Teresa Torres

For Product teams:

- Translate business outcomes to product outcomes, which are
 - Leading indicators
 - Often within the influence of the product teams
- Define appropriate product metrics based on desired product outcomes



Prioritising metrics that matter

Desired outcomes/preferred metrics usually depend on your product lifecycle

PRE-PMF: RETENTION

- Churn rate
- DAU/WAU
- User engagement



PMF: GROWTH

- Signups
- Conversion
- Customer acquisition cost



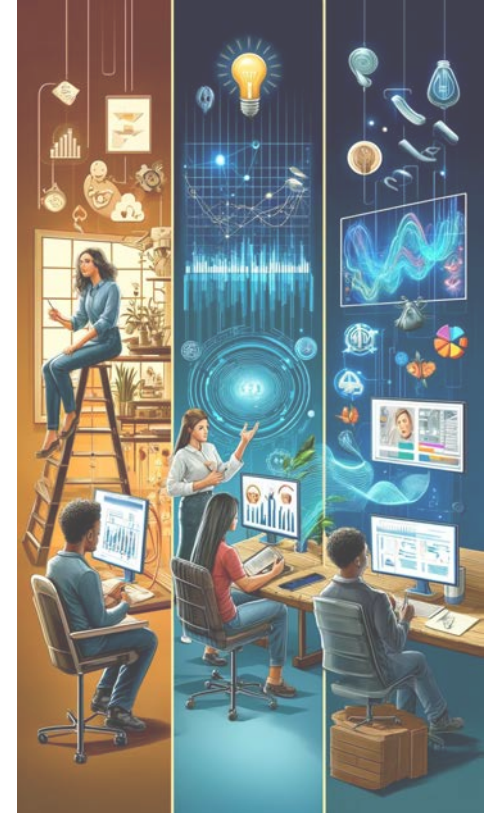
MATURE: REVENUE

- ARPU
- CLTV
- Free-to-paid conversion



User interview: Unveiling the "Why" behind the "What"

- Quantitative data provides valuable insights into the “what” of user behaviour
 - E.g., clicks, reactions, search queries
 - Used to form initial hypotheses
- Qualitative data, from user interviews, usability tests, customer support, etc., comprehends the “why” behind user behaviour
 - E.g., Are users not using a feature because it’s not useful or because it’s not easily discoverable
 - Used to validate the hypotheses



Examples

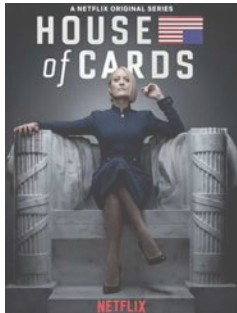
How Netflix Uses Data to Understand User Preferences

Existing content: ML algorithms provides highly personalised experience

- Film recommendations, page layouts, thumbnail images, etc. were all decided based on individual user behaviour
- Uplift of \$1 billion a year in revenue from improved retention

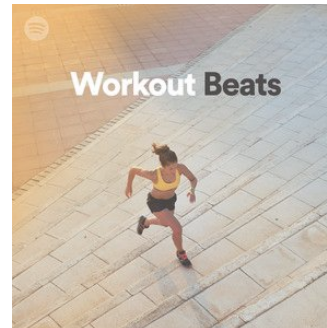
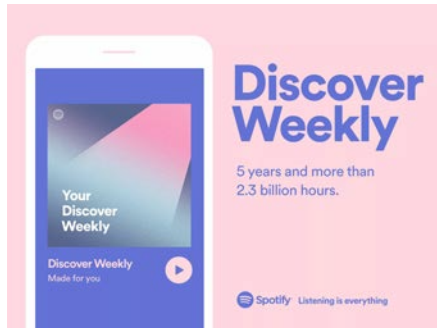
New content: Data guides the decisions on content creation and acquisition

- House of Cards
- Stranger Things
- Orange Is the New Black



Spotify empowers users and artists through data

- **Personalised user experience:** Custom playlists based on listening habits (e.g., "Discover Weekly").
- **Strategic Content Development:** Creation of playlists and categories based on observed user behaviors (e.g., "workout," "chill").
- **Artist Empowerment:** Insights from 'Spotify for Artists' and Fan Study for targeted marketing and tour planning.



Implementing Data-Driven Product Discovery effectively

Common mistakes/challenges

Vanity metrics

- Avoid falling into the trap of focusing on metrics that do not reflect true user value.
- Prioritise metrics that align with desired outcomes.

Data vs. Intuition

- Data should not replace intuition, creativity, and empathy that are essential for crafting truly remarkable products.
- Product teams need to be comfortable making decision with imperfect information.

Low quality data

- Inaccurate or incomplete data can lead to distorted results and suboptimal product decisions.

Implementing Data-Driven Product Discovery Effectively

Clear goals & metrics

Establish a sharp vision for your product and define success metrics that align with that vision. This enables you to select the appropriate data points to measure and track progress.

Tools

Utilize analytics platforms, user research tools, and A/B testing frameworks to effectively gather and analyse data.

Data-driven culture

Promote an environment where data is valued and informs decision-making across all levels of the organisation.

Embracing experimentation

Regularly conduct A/B tests or perform time-series analysis to quantify the impact of changes whenever possible. This allows you to validate assumptions and continuously optimise your product based on user feedback.

Maintaining data hygiene

Implement robust data collection and validation processes to ensure the accuracy and consistency of your data insights.

Thank you