Product sense intervi	20.2		
Product achie mich			
		> Product	knowledge
a Dad.	ما ما ما ما ما		exempion
7 1000	ut cases—	_ Preduct	execusion
		- Applied	statistics
		. 11	

Neasure product audity e.g. How would you measure success on Youtube? Hetric Investigation e.g. Amazon revenue decreased this month. What would you do? product Improvement e.g. How would you improve WhatAp? - Pegruines Indepth knowledge of product Fre de a should be launched or

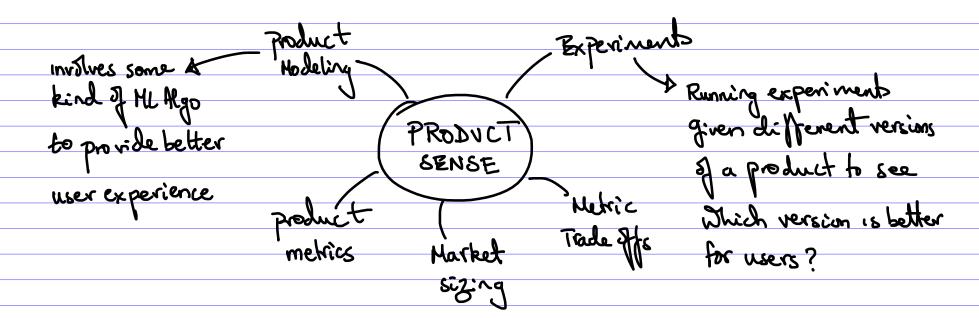
- 1. Demonstrate product knowledge by providing a product overview } product
 2. provide a sound product execution
- 3. Demonstrate data intuition > Technical knowledge
 4. Be statistically sound >
- 5. Understand problem clearly Z communication

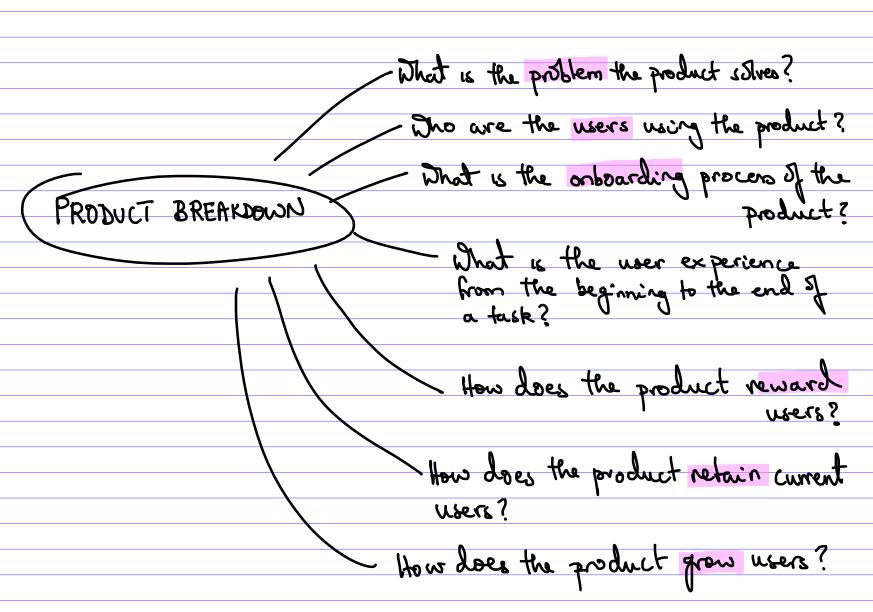
 6. Explain thought process clearly. S

- 1) Empathy: Hoility to understand & feel what a user is experiencing
 - -> products are designed to solve a users' problem
 - At present, what path is the user taking to achieve a part-cular task? How can we create a product to streamline the procure for users?

* pain points effectivenus

2) Execution: Ability to solve a user problem with product decisions using ideation, analytics & experiment





e.g. Facebook News Feed > Product [specific leature in facebook]

- 1. Curates (ontent [Helps save users time in Finding content related to them or are interested in]
- 2. Facebook users
- 3. Email Sign-up
- 4. Journey:
 - scroll
 - React
 - Commen
- 5. Reward: Stay Connected/ Exposed to the local & international current affairs.
- 6. Retention: Notifications
- 7. Growth: sharing pook across wers

```
PRODUCT HETRICS
Can't measure -> Can't Improve
1) Product Vision: What is the main goal of the product?
             -> What is the company's mission purpose focus?
             (Organization |v1) + thy should it exist?

(Qulitative) + that does it sper to the world?
                    1) hogle: To organize the world's info & marke it
                             universally accesible à meful
                    2) META: To give ppl the power to build community
                               & bring the world closer together
                     3) Netflix: To entertain the world
             -> What value does the product offer to users?
                   value proposition: a statement that clearly identifies
                                         the benefits a company's products
                                         & services will deliver to its
                                          customers.
                      Content engina
                           Value proporition: Curates Content for the users
                                               so that they don't need to
                                               put the extra effort mto searching
           It Defining clear goals can guide us in deciding what could be the main product metric.
             -s what steps does a user take to achieve success?
                     What actions does a user perform to get value?
                     e.g. News feed
               -> How does the product generate revenue?
                      product → monetize → sustain → Help users
                      eg. News Feed
                           Advertiser > Publish -> dick -> Revenue
   @ North Star Metric : What is the primary metric that measures
        (High level) the success of a company?
              KPI : key performance Indicator
              The primary KPI that best aligns with the company's
               mission statement.
                                           - Providus value to users
                   North Star Metric
                                         ) — contributes to profit
                                             Gauges long term growth
                      1) spotify: Time spent listening to music
                       2) google & search volume
                       3) facebook: Hours consumed
                       4) Netflix: Hours streamed
   3) Driver & Secondary Hetrics: What are the granular product-and feature-level metrics that correlate with
                                                   product or feature IVI
                               Driver Metrics
                                                    Correlates with NEM
            Secondary
                                                     Used in Experiments
                                                      _ supports driver metrics
                                Secondary Makies)_
                                                    - Breakdown of a Product
funcel
                                                      Used in Experiment
                                                      View # of views
                                                       -React # of Reach
                              News Feed
                          Driver Metric: Time spent on
News feed
                                                       - Share # of shares
     Facebook R
NCM: Total time spent on platform
                               Groups &
                        Driver Helic: Time spent React # of Reactions
                                on Groups
   Building a Me tri
                                   Action: what is the main action
you are measuring? e.g. click, view, post
           METRIC
                                  Unit of Analysis: At what level do you want to measure the action?
                                                     e.g. User, sersion, Month
                         Statistical Function: How do you want to grunnity
the action?
                                                         e.g. Total, Avg, Court
         e.g. Time spent on News Feel
              Total time spent on News feed Per Month
    Hetric Framework - Help to come up with metrics
                  Agruisition
                                        How do customers find you?
                                         thus quickly do customers sign-up?
                  Activation
                                        How long do customers stay active?
                  Retention
 Mwan
                                        How do customers let others know about your product?
                 Referral
                   Revenue
                                        How do you increase revenue?
      2. Happinens - How satisfied & happy are your customers? in surry some
          Engagement - How are customers engaged on you product?
           Acquisition - How many new visitors une you getting in a grown?
           Retention - What are the # factive users in a given
Taok Success - How long loss it take for a user
to complete a task?

Lib M....
                                                 task efficiency
     How to measure X of a product Y?
            (mal - what is the business goal of the anestin?
             Action - what is the user Journey of the product?
             Métrics - How do you measure the product?
             Evaluate - How would you privritize & evaluate the metrice?
    e.g. How do you measure success on (VonTube?) D'ino sided Harket
consumer creaturs
          & provide anuved info -> get clarification -> Recieve info
          1. mal
               -> what is the purpose of the product?
                    Youtube is a video platform that allows users to view & publish videos. The platform's mission is to "give everyone a voice & show them the world."
                → What does the term "success" mean? Breakdown into dimensions
                    Track growth, engagement, & monetzerton of YouTube
                → Who is the key audience of the metrics?
                    Executives & product managers care about success
                to That is the business impact of measuring the product?
                     Stakeholder can make key product decitions based on the trends & forecasts of success metrics.
           2. Action
                -> what are the concrete actions a user takes to
                    achieve a task?
                              Too Vague
                              Sign-Ups, Clicks, Purchase ~
                                    comment
            3. Hetrics
                 To varies depending on Questions.

Question
                   e.g. success engagement this
                                  Monetzation _ Metrics
       hrowTH
 -> Daily Active Users, WAU, MAU
 -> Stickinus Score: How often users are returning to an app DAU/MAU
 - Sign-up Rak: # Sign-Ups/Visitors per D/W/M
    Engagement
  M Watch hours per DWM
  - b fly " " " per user
   - Total 4 of pools created per D/WM
   to try hours spent per day per user
       Monetization
   + Total Ad revenue per PWM
   -> Subscription & per D/W/M
  - + Avg Ad revenue per day per user
           4. Evaluate
                     -> Primary Metric
                         + Total watch hours per D/W/M
                     -> Secondary Mutrics
```

* Total # of poots coorded per D/W/M
* Total Add generated per D/W/M

MEASURING PRODUCT QUALITY How do you measure [greatity] or [product]? What is GROWIH? Measuring growth ensures that a product is increasing its active user size. Acquisit-on New user envoluent e.g. sign-up rate AROWTH Engagement Measure of usage c.g. # of searches Referrals Measure of shares

Retention # of active users D W/M GROWTH ACCOUNTING: # of Active users(t) = New Users (t) + Retained Users (t)

- Churred user(t) given time pariod What is SUCCESS? A quality that embodies Whether a product is on the right path towards the company's North star. order of decreasing importance Engagement usage metrics SUCCESS (rouster tdoption, retention, referrals, engagement * Morefization & generated months if company is primarily focused on monetization & not providing value to users, While this may work out in the short term, in the long time it may impact the engagement, groute & finally monetzation. e.g. hogle deciding to populate the search enging with los of Ads. What is HEALTH? A 360-legne overview of a product's come functions. Use the HRART framework to measure the health of a product. e.g. How would you evaluate the success of React-ons on Facebook? moal: Fb's reactions enables users to express emotions visually on Facebook ports. A fgrick way bruses b express themselves. succes engagement Vser journey: 1. Read a post allows viewers to gauge the general 2. Click an Zmoji sent ment 3. Display Reactions Hebics: Engagement - Aug reactions lay war & posto are something to be consumed on a larly basis. Aug reactions day post , # of reaction wer per Day arouth # of reaction user per month Adoption Rate = # of Reaction Vier per Jay DAV Evaluate: Primary: # of React on Ver pur Day Secondary: - count of reactions per day - Ang recutions per day pur user - And reactions per day per point e.g. How do you measure the success of google Photos? frees up space Saves users photos from mobile devices in the cloud cloud sync D creak a goode account D upload photos & videos Create play histo, search, shares (# of photos per month (volume based usage Avg # of photos uploaded month user Monetization Monthly sprage service nevenue

1. of subscription tier eg. How to you we as use the health of slack? a communication app that allows members to communicate à Maborate on ideas. O sign up with an email account 1 700 t & read messages 3 create channels @ search contemb Happiners - B satisfaction score; surreys Engagement # of groups per moth

Average size of groups Adoption - O(signuprate) sticking scom Tosk succes !! I slack groups succesfully created 1. of messages succenfully sont e.g. How do you measure growth of Uber Earls. * To help people get anything i.e. fish, growies etc. one of user's flagship through the combet to of a phone and help people 3 sided market restaurants

adoption customers

retention app that delivers earn this way. restaurant neads to cusponers on-demand. O signup O Browse restaurant + menus Dougely us demand # of customer sign ups per mont for week. adoption # of delivery driver sign up per month # of rostaurants partnered per month Rotention MAN Engagement - # of deliverrespenday worth Referrals - # of referrals wonds 4). If where one (premium) user box

```
METRIC INVESTIGATION
× At product case that involves investigating an unexpected change
  in key metrics
                                 Walkthrough your analysis
approach O
    Ask greations/make aroumptims
    to have the problem 0
                                   to address the change if necessary
    Hypothesize rust cours
   of the metric change &
      e.g. Monthy sales revenue on amazon dropped by 207. on December, how
           would you invest-gate this?
        1) sales revenue = SUM (Price(i) * grankty(i))
                          1 i-transaction
                             looking at the building blocks of a metric
                             may give insights us to how the metric
                             change has come.
           *Amazon is a ungloneration of multiple busines
             are we taking into consideration all the business or a
             specific part of Amazon?
           * 15 the 20-1. drop based on the sales revenue
               compared to Declast year or the previous month
               of sure year?
        1 x ordline Research questions/procedure to identify Post course
           * onthine your approach to the investigation
           + NE ARE NOT FINDING THE RAT CAUSE BUT 24THER DEVISING AN APPROACH FOR ANALYSIS.
                 + Time: 15 the drop sudden or gradual? 18 it seasonal?
                  * Funnel: Which step of the conversion procedure does the
                  * Regional: is the change global or regional? Lashing
                                et revenue shave accross countries & contremb.
                 * Device: & the Change seen across devices or some OS?
                 # other leatures: is the change seen across the platform or specific
                                           amazon.com protects à hab
                 * Competition: is the decline happening to other companies?
                terms: cuspmer patterns, user experience triction
             * 18 the drop billowing a seasonal frend?
             * there abother feature, outage, or data pipeline some?
             * this there been a new product or feature released with buys or
               change aversion?
             * tre users losing interest?

* Amazon is nellestabled

* advertising failing to reach a segment of users?
             * 15 there a similar product that's diluting user engagement?

1.C. cannabilism

LSK at ky KPI'S for SIJ & new partnet
             * Are users switching to competitors
              * other External factors: Media bucklash, inflation, parding
           = x wait longer to see of the head continues to drop
           > + Notify the product & for engineering manager to address the change.
           # + Address the problem by fixing the code
               * Rollback the Rature.
            = # Develop a new marketing, funnel, 2/or product strategy to
                  ncrease user engagement & growth.
       e.g. Facebook engagement declined by LOF. this month, what do you do?
               * Are we talking about Facebook cone app or the ecosystem as a stole?

Proxy for engagement
                * en gagement? total session time per day? per month?
                                       Concapulates the overall functionalities users display on FB.
                * 104. ? Compand to previous north? year on year?
                            is it gradual or sudden change?
                It check the head of previous years to evaluate seasonality.
                * check page visits, and clicks, DAU, MAU
                                             x Metrics are correlated
                 * Assers by continental & country livels
                 * Assess by dirice types
                 * check engagement of cone features within the app
e-g. works, marketplace.
                     Also check other products within Meta's econgston.
                 It is the decline happening to competitors?
           * 10% lective is too steep for seasonality to occur p faulty reporting

* to there a bother feature, outage, or data pipeline issue?
               * A major bug in core teature such as News Feel, or pstentially
                  New lyout on FB causing change aversion.
              * thre users losing interest?

* Tacksk is nellestethished

* advertising failing to reach a segment of users?
               * is there a similar product that's diluting user engagement?
               * Are users switching to competitors
                  other External factors: Media bucklash, inflation, parding
              * Noth of tix
                      hoste at error logs
                       to liste at kneline of major releases
         e.g. Youtube comments are up by 5. but watch time is
               down by 3%. this month. What do you do?
               * comments ? lext replies to videos
               [MSN] costiv grinvenos trage en it: enidaben *
                           Gange engagement.
                * 15 the decline year on year or compared to previous month.
                4 given comments vrenaced we expect watch time
                    to 4 also 7.
                or check the hend of previous years to evaluate scasonality
                x check page wints, view count, and clicks, DAU, MAU
                 * Ksers by continental & country livers
                 * Assero my Levice Lypus
                  + check engagement of we behaves line
                  * sthe decline happening to other competitors?
                  * the changes could be related or independent of each
             * 15 the drop billowing a seasonal trend? Mayke as its 3% =
             & w there abother feature, outage, or data pipeline "sme? =
             * A new U/UX on YT video page 15 causing a behavioral change. Dhaybe comments 4 b/c of UI/UX
             * Are users losing interest?

The pathing be do with this may be the ranking also is the ranking also is at working party.

* It advertising failing to reach a segment of users?
             * is there a similar product that's diluting user engagement?
             * The user's switching to competitors?
              * other External factors: Media bucklash, inflation, parderic
            tion & Hitsak
             * FX
              * Rollback
             + New marketing strategy
```