NOVUS

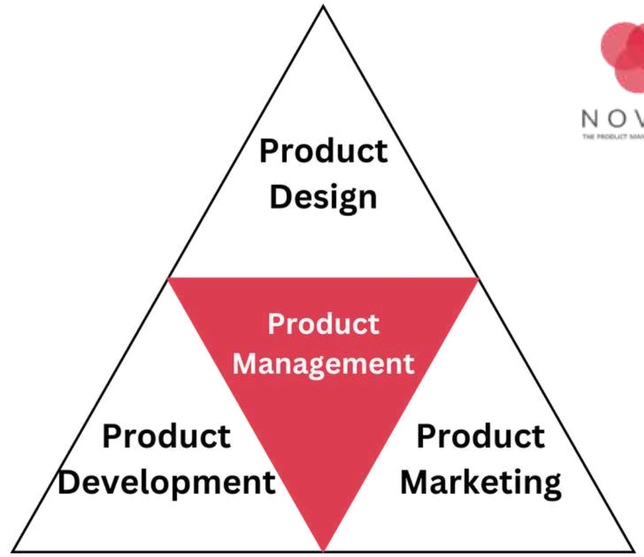
THE PRODUCT MANAGEMENT CLUB

PRODUCT MANAGEMENT

COMPENDIUM 3.0

WHAT IS PRODUCT MANAGEMENT?

Product management is akey organizationalfunction responsible for overseeing the entire lifecycle of a product, from its development and business justification to planning, validation, forecasting, pricing, launch, and marketing at each stage of the product life cycle.



WhatdoesaProduct Managerdo?

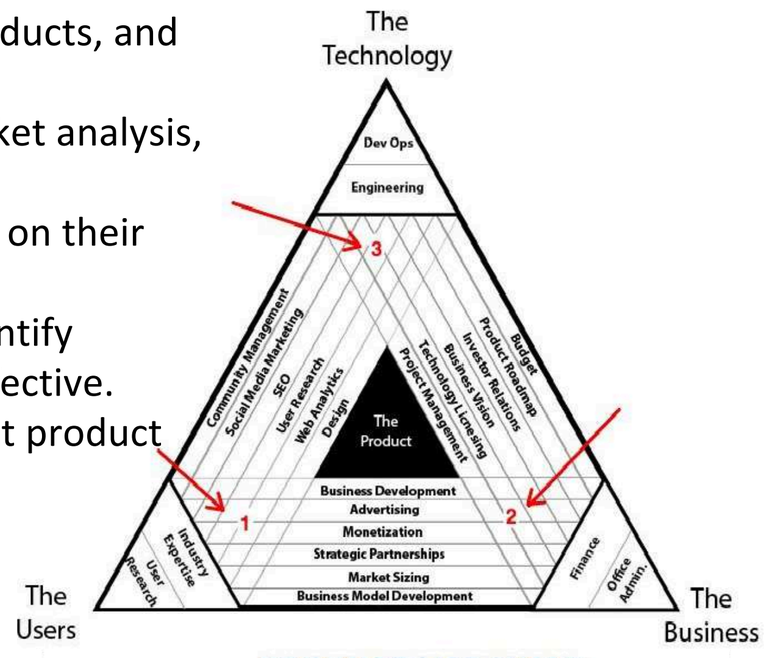
Theday-to-dayworkofaproductmanagervariesoverthecourseofthe productlife cycle.

The role of a product manager can vary significantly depending on the type of product they manage:

- **Shipped Software**: This includes products like mobile apps released through platforms such as the Apple App Store. Once launched, shipped software is challenging to update, making the initial release particularly crucial.
- **Online Software**: Unlike shipped software, online products can be updated more easily and frequently, allowing for continuous improvements after launch.
- **Consumer Products**: These are products used by the public, such as social networks, photo-sharing apps, or web search engines. The focus for a product manager here is on understanding consumer behavior and preferences.
- **B2B Products**: Business-to-business (B2B) products, like online ads or productivity software, often require a deeper emphasis on customer research and market analysis, as the target users are companies or professionals.
- **Early-Stage Products**: When working with products that are about to launch or have recently launched, the product management team is typically focused on shipping a minimum viable product (MVP) and gathering early feedback.
- **Mature Products**: For products that are well-established in the market, the product manager’s role is largely centered on iterating and improving the product to maintain or strengthen its position as a market leader.

PrimaryroleofaPM

1. **Identifying Profitable Opportunities**: Gain a deep understanding of the market, assess existing products, and conduct research to identify user needs and emerging trends.
2. **Defining the Product**: Determine which features should be included in each release, based on market analysis, target user segments, and the potential impact on different user groups.
3. **Guiding Development**: Write clear requirements and user stories, while prioritizing features based on their effort, impact, and alignment with overall objectives.
4. **Scaling the Product**: Develop go-to-market strategies, analyze user interactions, experiment to identify successful elements, and use market insights to focus on what works while eliminating what's ineffective.
5. **Product Strategy**: Manage the product roadmap by aligning it with market trends and ensuring that product goals stay in line with the company's overall objectives.

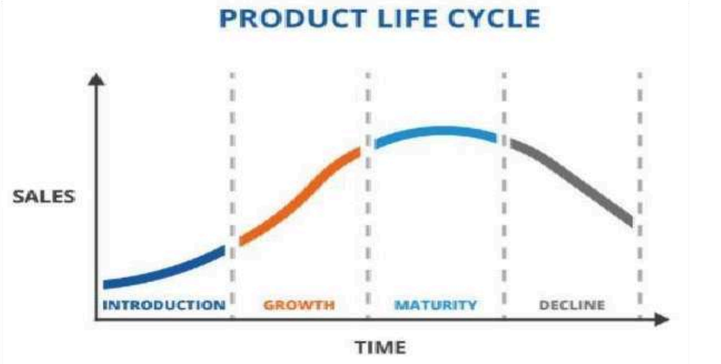


3 Types of Product Management

- ❑ **Triangle#1:**TheUser-FirstProduct Manager
- ❑ **Triangle#2:** The Business-First Product Manager
- ❑ **Triangle#3:** TheTechnology-First ProductManager

Types of Product Managers

- ✓ Internal PM
- ✓ Business to business PM
- ✓ Businesstoconsumer PM



4 MAJOR PHASES OF PRODUCT LIFECYCLE

1. **Introductory Stage**:
   - The company launches the product in the market.
   - There is minimal to no competition at this point.
   - The business typically incurs losses as the product is still gaining traction.
2. **Growth Stage**:
   - The product is gaining acceptance in the marketplace.
   - Sales begin to increase steadily.
   - The company focuses on enhancing the product.
   - Competition is still relatively low but starting to grow.
3. **Maturity Stage**:
   - Sales reach their highest point.
   - More competitors enter the market, intensifying competition.
   - The company faces challenges in maintaining its market position.
4. **Decline Stage**:
   - The product reaches market saturation.
   - Sales begin to decline.
   - The product starts to phase out of the marketplace, becoming outdated or irrelevant.

THEPRODUCTDEVELOPMENTPROCESS

1. Idea Generation for Product Development:

Thefirststepin theproductdevelopment processisto generate ideas. This involves a structured and creative exploration to identify innovative and exciting opportunities for new products.

Through brainstorming, market research, and discussions, companies gather a wide array of ideas that could potentially align with their goals and customer needs.

2. Idea Screening to get the right one for Product Development:

Once ideas are generated, thenext step is screening. This is where the initialideas are evaluated and filtered to determine which ones have the greatest potential for success. The screening process helps narrow down the options, focusing on those that are most feasible and likely to deliver value to both the company and its customers.

3. Concept Development & Testing:

Next,we movein further with the productdevelopment process, and the ideas which sound a bit attractive will be then used to produce the best concept for the product development process. The concept of the process is just a detailed version of these ideas, which are generated and filtered in the above-mentioned part so that they can match the terms which are used by the consumer. After finalizing the concept of the idea, one needs to focus on the development as well as the testing of the idea as well. This is to find out whether the product is good enough to meet the standards of the consumers.

4. Prototyping stage of Product Development:

Before movinginto full-scale production, theproduct goes through the prototyping phase. Multiple versions or samples of the product are created and iterated upon to achieve the best possible design. This phase is crucial for refining the product and ensuring that it meets quality standards before it is produced for the market

#5 DevelopmentOfMarketing Strategy:

Onceyou havea well-developed andtestedproduct concept, the next critical step is creating a robust marketing strategy tailored to the new product. This involves understanding your target audience, determining the right price, and planning for long-term sales growth. A well-thought-out product launch is essential to ensure the product is introduced effectively to the market, maximizing its impact.

#6 Business Analysis:

With the marketing strategy in place, the focus shifts to the business side of the product. Conduct a detailed business analysis to ensure the product aligns with the company's financial goals and objectives. This involves reviewing sales histories, analyzing the performance of similar products, and conducting market surveys to forecast the product's profitability and market potential.

#7 Product Development:

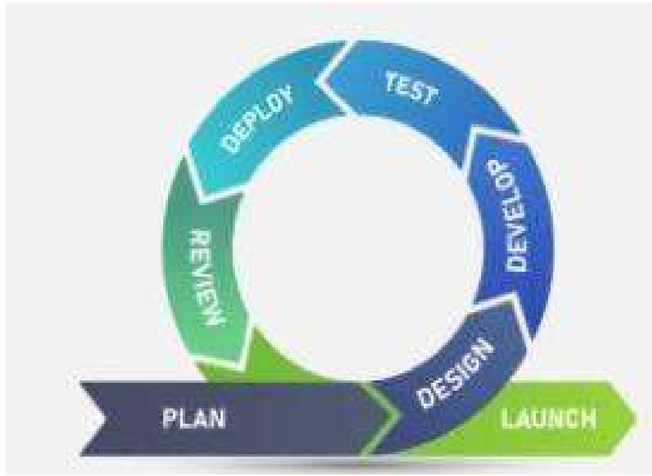
Following a successful business analysis, the product moves into the actual development phase. This is where the concept becomes a tangible reality through manufacturing. It's important to estimate production costs in advance to avoid issues during this stage. Test marketing is also conducted to gauge how the product will perform in real-world market conditions before a full-scale launch.

#8 Commercialization:

After completing test marketing and refining the product, it's time for commercialization. This is the official launch of the product to the public. Key factors like launch timing, location, pricing, and promotional strategies are crucial to the product's success. The product is now ready to enter the market and make its mark. During commercialization, it's important to focus on post-launch activities such as tracking sales performance, gathering customer feedback, and analyzing the product's reception in the market. Continuous monitoring allows for quick adjustments to marketing strategies, pricing, or distribution if needed, ensuring the product remains competitive and aligned with consumer expectations over time.

WHATISAGILE?

Agile is a methodology that follows the following principles:
Individuals and interactions *over processesand tools* ***Workingsoftware*** *overcomprehensivedocumentation*
Customer collaboration *over contract negotiation* ***Respondingtochange*** *overfollowinga plan*



What isAgile Product Management?

Agileproductmanagementis anadaptive approach toproductplanning and execution that enables organizations to swiftly respond tocustomerfeedback and deliver products that resonate with users. It is instrumental in defining product strategy and developing product roadmaps within an agile framework. At its foundation, agile product management emerged as a response to the prevalent adoption of agile software development methodologies, including Scrum and Kanban, ensuring iterative progress and continuous improvement.

What is "Scrum" and How Does it Work?

Scrum is the most common and it works like this:

1.The sprint planning meeting
- youtakethemostimportantfeaturesfromthetopofyourproduct backlog,andyoumoveittothe sprintbacklog
- youtalkaboutwhatneedstobedone inordertoimplement it

2.Thestartof thedevelopingprocess
- asprintusually takes2 weeks
- yourteamworksonthetickets bytakingthemoffthetopofthesprint backlog andmovingthem to"Inprogress"andthento"Done"
- attheendofthe2weeks,youshouldhavecompletedeverythinginthe sprint backlog; if not, they go into the next sprint

3. Stand-up meetings
- daily meetings held in the mornings
- peopleremainstandingduringthemeeting,inorderforitto remain brief and concise
- every team member makes a summary of their work.

4. Retrospective meetings
- youmeetwithyour teamattheendofeachsprint
- youtalkabout3mainthings:thelastsprint,whatwentwell andwhatdidn't,anyquestions people have

Whatis"Kanban"and HowDoesitWork?

Kanban is not as strict as Scrum in terms of meetings and times.

- AKanbanboardhascolumnswith cardsthatyoucanmovefrom onecolumn toanother,toreflectthe stateofthe item:"Todo", "In progress", or "Done".
- Howmanyitemscanbeineachparticularstateisuptoyouor your team to decide.
- Kanban doesn't use sprints

  >There isnosprintbacklog,onlythe productbacklogitself

  >The teamworksontheirticket,theymoveit todone,andthey takethe nexttaskoff the topofthe productbacklog
- Kanbandoesn'tprescribe anyparticularmeetingstypes.
- Kanbanismorerelaxed,butitmakesitmoredifficulttoevaluate howmuchtimeit'sgoingtotaketodevelop items.

SCRUMteamconsistsof:

Development team
Product owner
Scrum master
Stakeholders

WhatisWaterfall Development?

- TheWaterfallframeworkistheoppositeof Agile.
- In the Waterfallframework,wetakeallthe featuresofaproductand developthem all atthe sametime.
- Doing things inthe Waterfallwayisriskier.
- It's muchhardertoadapttothe marketfeedbackafteryou'vealreadybuilt everything

WhatisaProduct Roadmap?

A productroadmapisasharedsourceoftruththatoutlinesthevision,direction, priorities, andprogressofa productovertime.It’saplan ofactionthatalignstheorganizationaroundshort-andlong-termgoalsforthe productorproject,andhowtheywillbeachieved.

Productroadmap goals:

- Describe the vision and strategy
- Provide a guiding document for executing the strategy
- Get internal stakeholders in alignment
- Facilitate discussion of options and scenario planning
- Help communicatewithexternalstakeholders,includingcustomers

WHATIS APRODUCTREQUIREMENTDOCUMENT?

Contents of a PRD

•**Title**: Givethisprojectadistinct name.
•**ChangeHistory**: Describeeachimportantchangetothe PRD,includingwho changedit,when theychangedit,and whattheychanged.
•**Overview**:Briefly,whatisthisprojectabout?Whyareyou doingit?
•**SuccessMetrics**:Whatarethe successmetricsthatindicateyou'reachievingyour internal goals for the project?
•**Messaging**:What'stheproductmessagingmarketingwill usetodescribe this product to customers, both new and existing?
•**Timeline/ReleasePlanning**: What'stheoverallscheduleyou'reworkingtowards?
•**Personas**:Whoarethe targetpersonasforthisproduct,andwhichisthekey persona?
•**User Scenarios**:Thesearefull storiesabouthowvariouspersonaswillusethe product in context.
•**User Stories/Features/Requirements**: These are the distinct, prioritized features along withashortexplanationas towhythisfeatureisimportant.
•**Features Out**: What have you explicitly decided not to do and why
•**Designs**: Include any needed early sketches, and throughout the project, link to theactual designs once they'reavailable.
•**Open Issues**:Whatfactorsdoyoustill needtofigureout?
•**Q&A**:Whatarecommon questionsaboutthe productalongwiththe answers you'vedecided?Thisisa goodplacetonotekeydecisions.
•**Other Considerations**: This is a catch-all for anything else, such as if you make a

key decision to remove or add to the project's scope.

Building a PRD: Step-by-Step

Step 1- Create Draft

Step 2-GetApproval

Step 3-SharewithDesignTeam

Step4-Sharewith EngineeringTeam

Step5-Share withProject Team

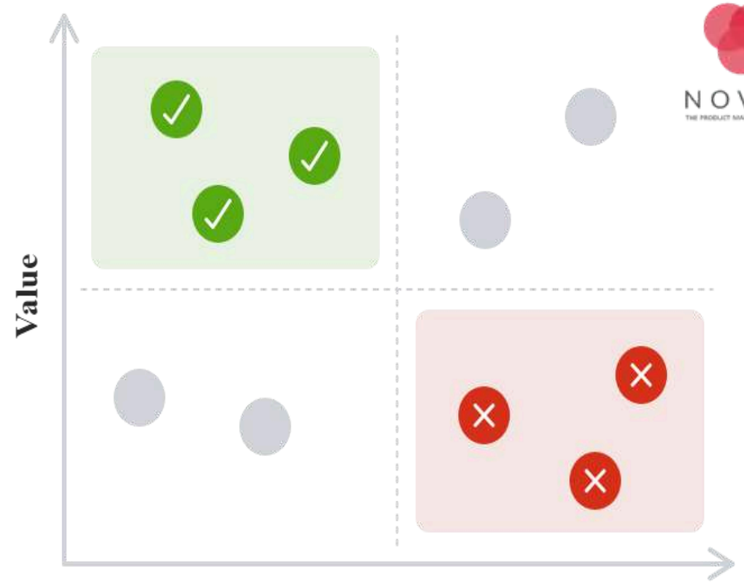
Step6-Sharewith Company

FRAMEWORKS

Prioritization Frameworks:

1.Valuevs.Complexity(Value vsEffort)

Thevaluevs.complexityframeworkgivesproductteamsanobjective waytodeterminewhich initiatives(features,bugfixes,etc.)toprioritizeontheroadmap.The teamthenscoreseachaction according tohowmuchvalueitwillbringtotheproductanditslevelofdifficultytoimplement.



VALUE:

Whileconsideringvalue,onemustask :
Whatdoes valuemean forourbusiness?

Andwhatdoes it meantoour user personas?

BusinessValue:

This requires youtoestimatehowmuchvalue particular

initiatives can yieldforthecompany.

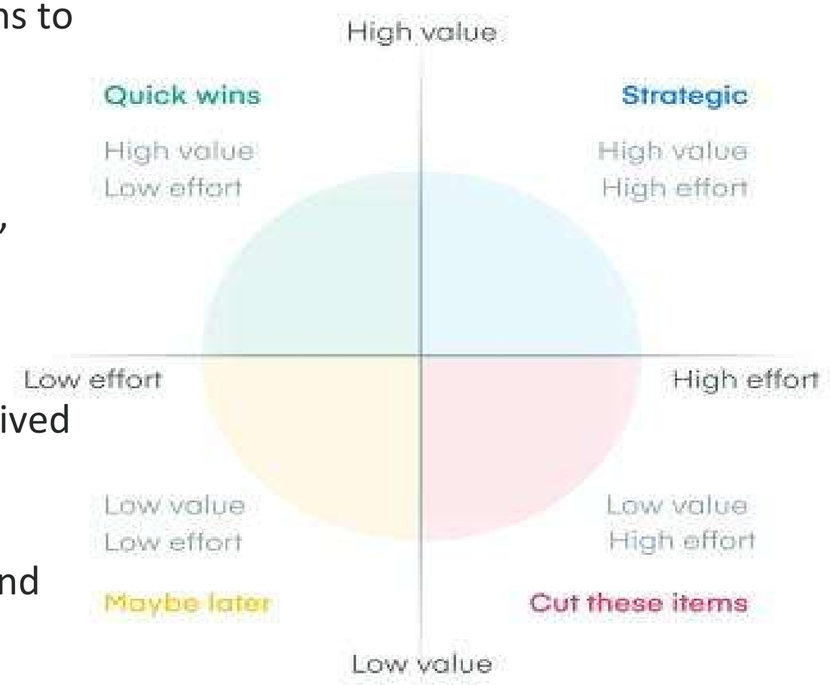
UserValue:

Thisdescribesthevalueeachinitiativewillbringto your user.Youshould considertheirpainpointsand how far it goes to reduce them

EFFORT:

Some of the most common considerations to scoreeffortare:

- Developerhours
- Overallresourcehours needed(mandays, personspermonth)
- Overall operationalcosts
- Risks (risk of failure,unanticipatedperceived valueupondelivery)
- Costs(internalor buyingexternalgoodsand services)
- Story points



2.Benefitvs.Cost(WeightedScoring)

Productmanagersusetheweightedscoringprioritization frameworktorankinitiativesaccordingtocommon cost-vs.-benefitcriteria.The teamcreatesscoresforeach criterion: “increaserevenue”underbenefits,forexample,and “implementationeffort”undercosts.The

overall can generate higher scores for those criteria it deems more significant than others.

HOWTOCREATEAWEIGHTEDSCORINGDECISIONMATRIX?

1.Listdifferentchoices Startbylistingallthedecisionchoicesasrows.

Don’tforgetanyrelevantchoices,sincethese rowswillformthe foundationofyour decisionmatrix

2.Determineinfluencingcriteria Brainstormwhatcriteria will affectthose decisions(this couldbe thingslikestrategicfit,revenueincrease, costs, projecthours,and riskoffailure,forexample).Listthese criteriaas columns

3.Weighyourcriteria Weigheachofthesecriteriainthecolumnsusinga number(theweight)toassesstheirimportanceandimpacton your decision. Establishaclear andconsistentratingscaleforeachone (for example,1,2,3,4, 5startingfromaninsignificanttogreaterimpact).

4. RateeachchoiceforeachcriteriaEvaluateyourdifferentchoices against the criteria. While using your defined rating system (in our case, from 1 through 5), rate each criteria individually. For example, if you think your mobile app has tremendous business value, give it a 5.

5.Calculatethe weightedscores Multiplyeachofthechoice ratingsby their corresponding weight.

6.Calculatethe total scores Sumupeachofthe choicesand comparethe total scores.

7. Makeyourdecision

The screenshot here shows an example of a team using six scoring criteria—three benefits, three costs—on which to rank the relative strategicvalueofsevencompetingproductinitiatives.

Title	Lane	Benefit: Customer Value	Benefit: Increase Revenue	Benefit: Strategic Value	Cost: Dev Effort	Cost: Operational Costs	Cost: Risk	Score	Rank	Actions
	Weight	40	20	20	50	20	20	170		
Mobile Mock Up	Mobile Team	5	5	5	1	1	1	170	1	
Market Analysis	Marketing Team	4	3	3	2	2	2	128	2	
Upgrades	Marketing Team	4	5	5	4	3	3	116	3	
Accept new forms of payments	Web Team	3	3	2	2	3	1	116	3	
UX Improvements	Mobile Team	5	2	4	5	3	1	106	5	
Feature Discussion	Web Team	3	4	3	2	4	5	104	6	
Enterprise Options	Marketing Team	3	5	2	3	1		102	7	
New Admin Console	Web Team	4	1	2	2	4	4	100	8	
Code Review	Web Team	4	3	2	4	3	3	96	9	
Customer Outreach	Marketing Team	2	1	5	2	4		88	10	

3. RICE framework

RICEframework,whichwasintroducedbyIntercomandhasbeen widely usedbyproductmanagers andproduct owners to prioritize feature releases and projects.
RICEisanumericscorethatiscalculatedas(Reachx Impact x Confidence) / Effort.

Reach: Howmanypeoplewilltheproduct impactwithin adefinedtimeperiod.**Confidence**: Howconfident areyou inyour estimates?
Impact: How much will this impact each person reached?
Scale tomeasure:
- Massive=3x,
- High=2x,
- Medium=1x,
- Low=0.5x,
- Minimal = 0.25x.

Scaletomeasure:
- High=100%
- Medium=80%
- Low=50%.

Effort: Howmany“person-months”willthe product take?

4. MoSCoW

Itisextremelyquick andsimple toapply asaprioritizationsolution, classifyingfeaturesinfourdifferentprioritybuckets:

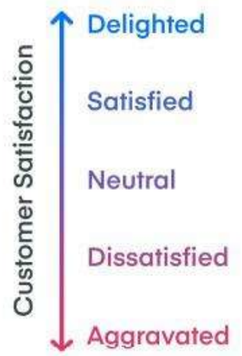
Mo	Must have	These are the essential features that need to be included into the product. Failing to include one would result in a failed release.
S	Should have	They are important requirements but not essential. They are initiatives that are of great importance and add significant value, but are not crucial.
Co	Could have	These are nice-to-have initiatives, as they don’t quite affect the core function, and would have a very small impact if left out.
W	Won’t have	These are definitely not a priority for the foreseen timeframe, and therefore will not be included in this specific release. In other words, they are out of scope.

5. KANO Model

The Kano model is apowerful framework for prioritizing features on your roadmap by assessing how they impact user satisfaction and delight. To use it effectively, gather a list of potential features and plot them on a satisfaction versus functionality chart. This will help you identify which features are essential, which will delight users, and which might be met with indifference.

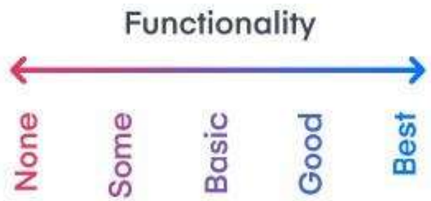
Satisfaction (Y-axis):

The vertical axis represents satisfaction, ranging from frustration (complete dissatisfaction) at the bottom to delight (complete satisfaction) at the top.



Implementation (X-axis)

Often referred to as investment or sophistication, this axis shows how well a feature has been implemented, the level of investment in its development, or how much of the feature the user experiences. It ranges from None to Best (or Very Well Done).

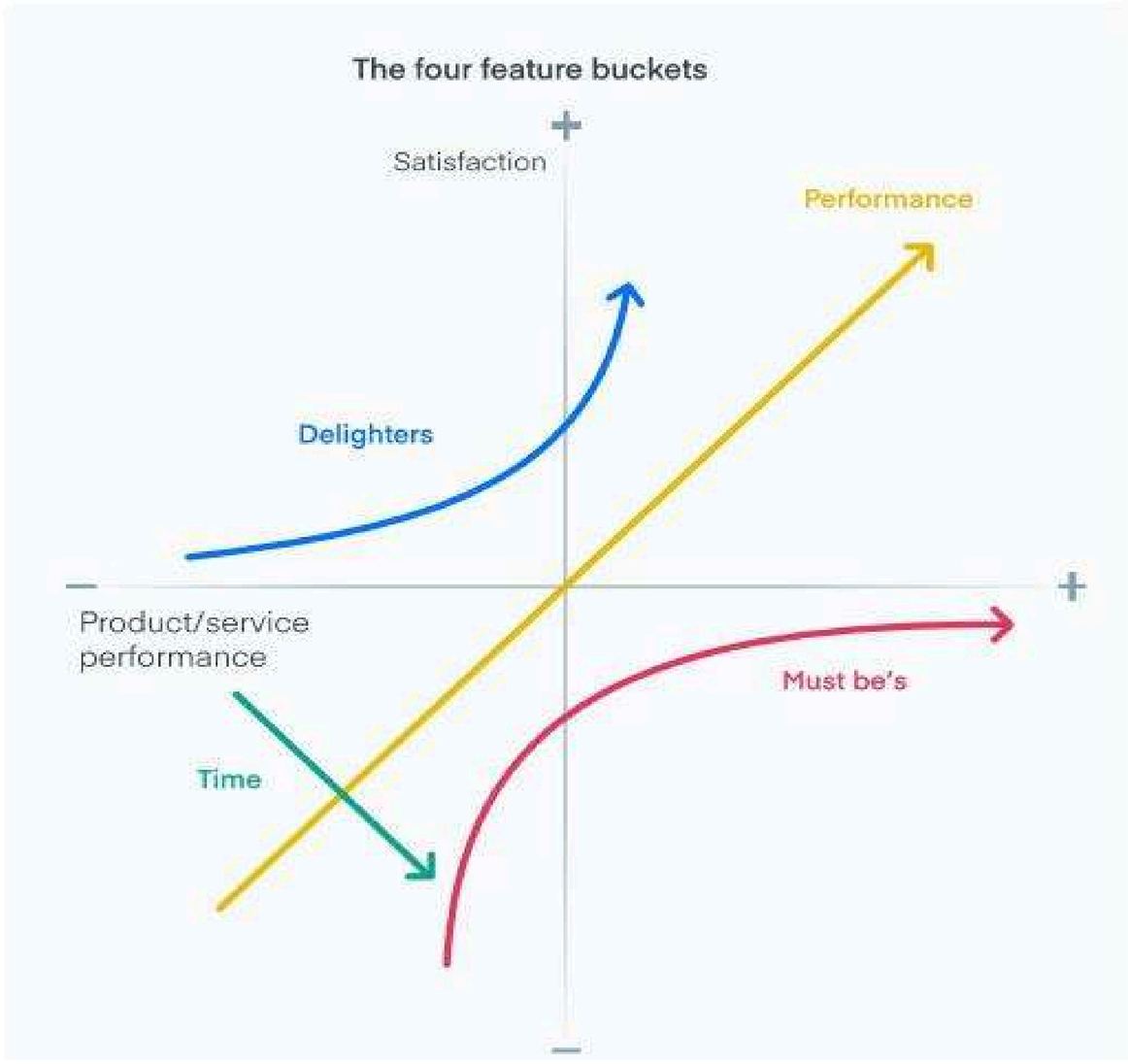


THE FOUR "FEATURE BUCKETS"

Basic features(Must-be's)

Performance features (one-dimensional)
Indifferent

Attractive features (Delighters)



6. Buy-a-Feature

Thebuy-a-featureprioritizationframeworkoffers a fun way for organizations to prioritize product work. Here's how it works: assign prices to each potential feature, give participants a hypothetical budget, and let them "buy" the features they want to see developed the most. This creates a dynamic, engaging way to rank priorities.

7. Opportunity Scoring

Opportunity scoring helps product teams identify features that are both crucial to customers yet underwhelming in performance. Customers rank the importance of features and rate their satisfaction with each. Features that are highly important but score low on satisfaction signal a prime opportunity for improvement, offering strong potential for ROI on development efforts.

8. Affinity Grouping

Theaffinitygroupingisdesignedasaninformalandcollaborativeframeworkforprioritization.Eachparticipantcomesupwithideastoimprove theproduct andplacesthemonnotecardsora whiteboard.Participantswill thenorganizetheseopportunities intosignificantthemes—the affinitygroups—andvoteonhow toprioritizeeachofthe possibilitiesundereachgroup.

9. Story Mapping

The story mapping framework provides product managers with a clear, visual overview of how each user story shapes the overall product experien Using a large board or wall, the team outlines key user steps and adds related stories beneath them. This creates a logical flow of the user journey helping the team prioritize stories based on their impact on the experience.

10. Eisenhower Matrix

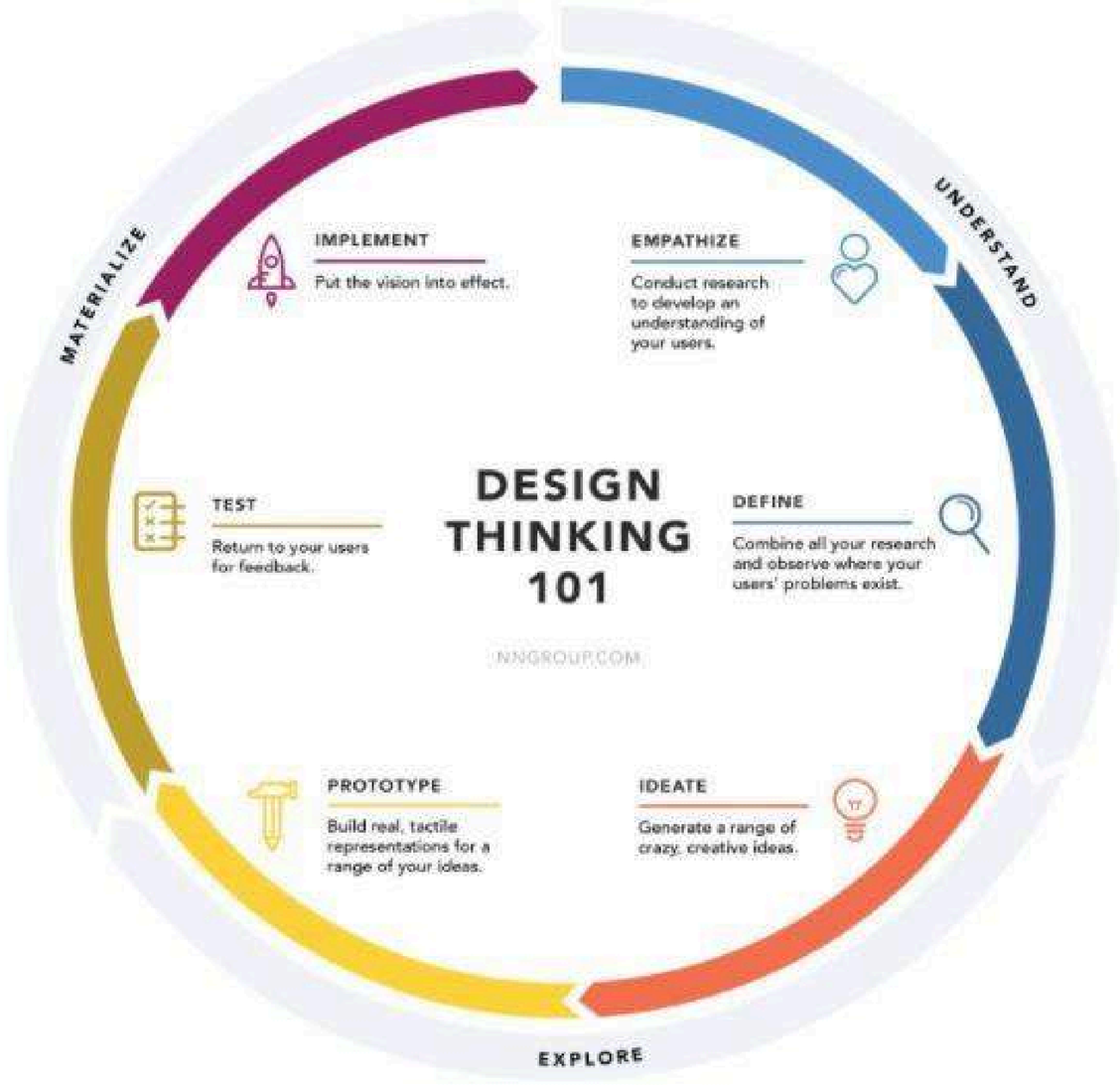
The Eisenhower Matrix can help teams improve their prioritization, productivity, and decision making. Named after a method used by President Dwight Eisenhower, this framework involves drawing four squares, two on top of the other. You'll label the x-axis Urgent and Not Urgent, and for the y-axis, you'll use Important and Not Important. This framework gives you four possibilities: from Important and Urgent, to Unimportant and Not Urgent. Once you've placed the initiatives on your list into one of these four boxes, you'll know which to work on first—those in the upper-left quadrant, Important and Urgent.

UX/DesignFrameworks

It’s also helpful to know how your UX and design teams use frameworks to prioritize.

1. DESIGN THINKING:

The **design thinking ideology** asserts that a hands-on, user-centricapproach toproblem solvingcanleadtoinnovation, and innovation canleadtodifferentiationand acompetitive advantage.Thishands-on,user-centricapproachisdefinedby the **design thinking process** and comprises 6 distinct phases, as definedand illustratedbelow.



The design-thinking framework follows an overall flow of

1) understand, 2) explore, and 3) materialize. Within these larger buckets

fall the 6 phases: empathize, define, ideate, prototype, test, and implement.

Empathize: Research to understand what your users do, say, think, and feel.

Define: Analyze your research to pinpoint where users' problems lie.

Ideate: Brainstorm bold, creative solutions to address the unmet needs Discovered inthedefinephase.

Prototype:Buildreal,tactilerepresentationsfora subsetofyour ideas.

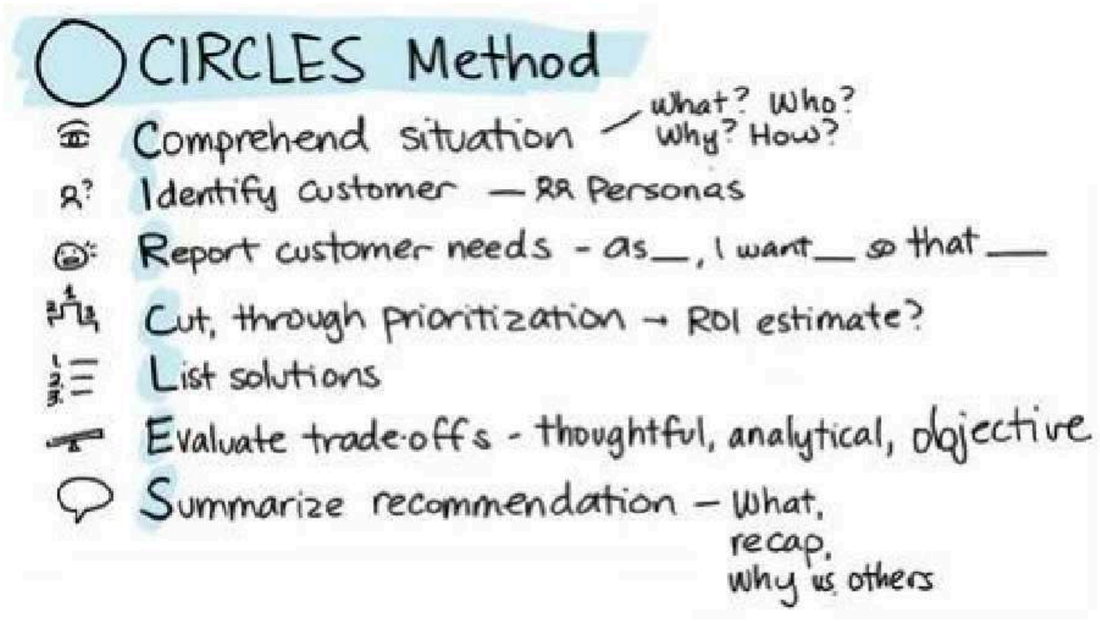
Test: Gather user feedback on your prototypes.

Implement: Turn the vision into action and bring it to life.

2. CIRCLES

TheCIRCLESMethod ™ isaframeworkonwhatmakesacomplete,thoughtfulresponsetoanyproduct design.It’sanaidthat preventsus fromforgettingastep.Youcanalsothinkofitasachecklistorguideline.

•**Comprehend**—The5 W’sand Hhelpcomprehend the situation:
Whatisit?**W**hoisitfor?**W**hydotheyneedit?**W**hen isit available?
Where is it available? **H**ow does it work?”
•**Identify Customers** — Who are your Target Customers?
•**Report customer needs** — List the Pain Points (Create a**vision**fromthe painpoints).
•**Cutthroughprioritization**—Prioritizeyourfeatures/problem statements.
•**ListSolutions**—Listdownyour solution,showyourcreativity.
•**EvaluateTrade-offs**—Discussthe Trade-offs.
•**Summarize** —Giveanoverall summaryofthe above.



3. KEY Design Process

According to UXPlanet, the KEY design process is a two-part approach that helps designers stay focused. It includes an opportunity segment and a solution segment. This flexible guideline serves as a constant reminder for designers to consider context, understand users, and validate their ideas before starting development.

4. Kennedy Principle

This design principle is inspired by President John F. Kennedy’s famous line: "Ask not what your country can do for you—ask what you can do for your country." The Kennedy design principle shifts this to focus on the user: "Ask not what your user can do for you, but what you can do for your user."

Since users have limited time and patience, don't make them do tasks your app can automate. For instance, if a form asks for a U.S. ZIP code, don't ask

Product Metrics Frameworks

1. AARRR

•**A**cquisition—How do users discover you, and through which channels?
•**A**ctivation—An initialexperiencegreatexperience?
•**R**etention—Do theycomebackand re-visit over time?
•**R**evenue — Can you monetize any of this behavior?
•**R**eferral—Do they like your product enough to recommend it to others?

2. AARM

•**A**cquisition:Tracking customer signups for a service is crucial, especially as the barrier to entry has lowered with the rise of free signups and freemium models. Key metrics to monitor include casual registrations and app downloads.

•**A**ctivation:Turning users who've done a basic signup into fully registered ones involves encouraging them to complete additional steps. For a social network like Google+, this might mean uploading a photo or filling out their profile page.

•
Retention: Encouraging users to engage with the service regularly and in ways that benefit both them and the business is key. Metrics to track include updating their profile, frequently checking the news feed, and inviting friends to join.

•**M**onetization:Tracking revenue involves measuring how many users are paying for the service and calculating the average revenue per user (ARPU).

3. HEART:

Google created the HEART framework to bring quantitative metrics to the “touchy-feely” world of UX. This flexible methodology allows designers to quantify either specific features or the entire user experience according to five metrics. Those are happiness, engagement, adoption, retention, and task success. Thegenesisofthisframeworkwasthetypical UXteam’sinabilitytoturn alltheavailabledataintoactionable intelligence. Using HEART,theycoulddefinemeasurableuser experiencegoalsand bring thedata-drivendecision makingtoanareaofproduct developmentthat typically doesn’trelyonmeasurablestodrivetheirdesigns. But there’sno reasontolimitHEARTtoUX—productmanagerscanapplythesame principlestoeveryaspectoftheir product.It’s a nicedeep-diveintocustomer delightand satisfactionthatmanyof the other frameworksonlycovercursorily.

•**H**appiness — By Surveys, Net Promoter Score, ‘Love’ Feedback ratio.

•**E**ngagement—CheckDAU/MAU,Sessions,and frequency.

•**A**daption— New Usersand Usage.

•**R**etention—Cohort →#usersinthe cohort[2nd time period]/#users[1st timeperiod].

•**T**askSuccess —Timecompletedtasks orerrors.

HEART Framework

		Goals	Signals	Metrics
H	Happiness			
E	Engagement			
A	Adoption			
R	Retention			
T	Task Success			

Agile Product Management Frameworks

1. Crystal Agile Framework

A direct outgrowth of the Agile Manifesto for software development, the Crystal Agile Framework method is a human-centered agile framework. That is, it is designed to give teams the freedom to develop and improve their workflows. Although this framework allows each team to find the right methodology to fit its needs and circumstances, it can also lead to confusion and even scope creep.

2.Disciplined Agile

Disciplined Agile (DA) is similar to the Crystal method in that it allows individuals and teams to find their preferred workflow methods. But it does offer some lightweight guidance for how these teams should work, pulling best practices from other methodologies such as Scrum and Kanban.

3. Dual-Track Agile

With the dual-track agile approach, a cross-functional team breaks its work into two categories: discovery and delivery. The discovery track focuses on quickly generating validated product ideas. Delivery focuses on turning those ideas into market-ready products.

4. Dynamic Systems Development Method (DSDM)

The dynamic systems development method (DSDM) evaluates how a project's lifecycle—from conception to completion—will impact the business. The framework evaluates each project according to four criteria: feasibility and business study, functional model and prototype iteration, design and build iteration, and implementation. The DSDM model states that "any project must be aligned to clearly defined strategic goals and focus upon early delivery of real benefits to the business."

5. eXtreme Programming

One of the most popular agile frameworks, eXtreme programming, is designed to help software companies deal effectively with dynamically changing requirements. It can also help companies deliver successful products to users with regularly changing needs or who cannot effectively articulate what they want. This framework uses a small development team and leverages automated unit and functional tests. When using eXtreme programming, it is crucial to keep in mind that the framework requires developers to work closely with managers and customers.

6. Feature-Driven Development (FDD)

7.LeanSoftware Development

Originally called the Toyota Production System (for the company that originated the framework), Lean Software Development model focuses on eliminating from development everything but what the product needs. It is also sometimes called the Minimum Viable Product (MVP) strategy, because the team's goal is to deliver a bare-bones product to its users, then use their feedback to improve the offering.

8.Rapid ApplicationDevelopment

The Rapid Application Development (RAD) agile framework is used to rapidly generate prototype versions of software products and release them to the market for feedback. The team then uses this feedback to improve the product, release the new version, and continue the cycle. The RAD framework consists of the following stages: requirements planning, user design, rapid construction, and cutover.

9.Scaled AgileFramework (SAFe)

A widely used methodology in large enterprises, the scaled agile framework (SAFe) is designed to protect against the common challenges large companies face as their agile teams scale up. This top-down decision-making framework focuses on three aspects of development: team, program, and portfolio.

More Product Management Frameworks

1. DACI

DACI is a decision-making framework named for the four roles it covers. There is the driver (who drives the decision), the approver (who makes the decision), contributors (who help with the project), and the informed (the people whose work could be impacted by the project).

2. GIST Planning

A product-planning framework, GIST is designed to help reduce management overhead, speed development, and deliver successful products. The name stands for the key pillars of the approach: goals, ideas, step-projects, and tasks.

3.Jobs toBeDone(JTBD)

Like design thinking, the jobs to be done framework is designed to change the team's focus from the product to the customer. This approach helps a product team learn what its customers want to do when they buy a product or service, so the company can focus its development on satisfying those needs.

INTERVIEW QUESTIONS

The questions have following common forms:

1.Design:Howwouldyoudesignaproduct?
2.Improve:Whatwould youimproveabouta product ?
3.Favorite:Oneyoulikeand why?
4.Product/BusinessStrategy of"X"products
5.Metrics:Whatmetricswould youtrackforthispriduct?
6.Launch: How would you launch a product?

Q1.Howwouldyouimprovea product?

Apply CIRCLES framework

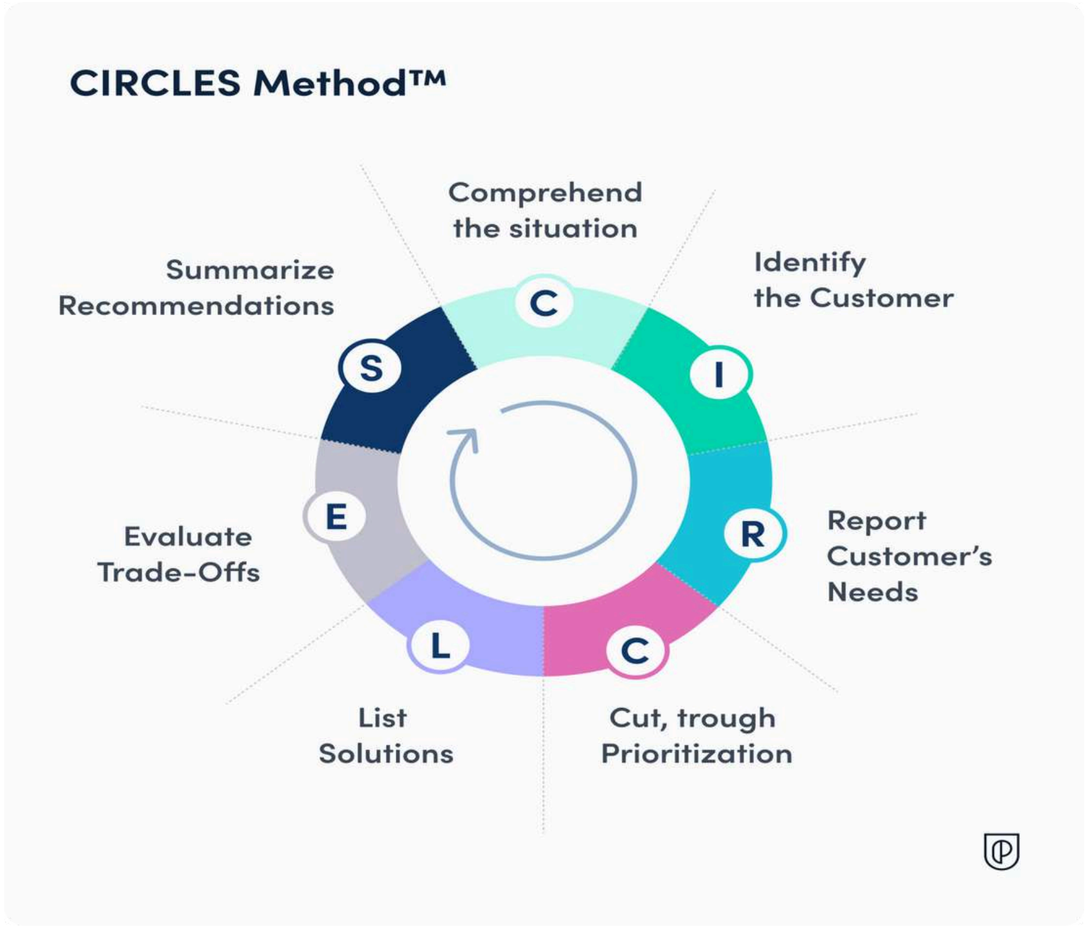
1.Describe the product

2.Ask Clarifying Questions

1.Isthe goaltoimprovethe entireplatformoraspecificfeature?
2.Isthe improvementchannelspecific -WeborMobile?
3.What's the objectiveofimprovement?-engagement,increasein revenue, acquisition. etc**.**

3.Layout the approach

(a) Identify the users (personas)
(b)Pickonepersonaandwhattheirgoalsor motivations
(c)Identifypain points(userneeds)and suggestnewfeatures/ solutions toincreasecustomersatisfactionleadingtobettercustomer engagement
(d) Prioritize new features based on cost vs benefit
(e)Summarize theoverallanalysis



Design feature 1.Think about what that product does at a root level 2.Think
about TG, their lifestyle and current behavior regarding the product
3.Go deep into user stories
4.Breakthe productintocomponentsandreuseeach componentintodifferentusecasesbasedon TG& user stories
5.Get clarity if you're expected to think of radical solutions orthinkintermsof feasibility

Example: Howwould youimproveGoogle Maps?

1.Describe Google Maps - Google Maps allows user to go from Point A to Point B efficiently and provides several commute options suchasdriving,walking,publictransport,andevenliketoridesharingappssuchasUberandLyft.UseralsousesGoogleMapstosearch nearby placessuchasrestaurants,gasstations,events,and thingstodo

2.AfterClarifyingQuestions,**identifyusers**:

1.Private vehicle owners
2.Commutersusingpublictransport
3.Walkers
4. Tourists
5.People using ride sharing app like Uber, Lyft etc.

3.Pickinguser-commutersusingpublictransportsuchastrain,bus,subwaystogofrompointAtopointB.Commutershatewhenthereis interruptionisservicesthatcouldbebecauseoftrainsrunninglate,majorbreakdown,changeintraintimingandroute.Peopledon'tlike waiting evenifthetrainorbusislatebycoupleofminutes.Also,notalltrainandbusstationsaresamewhenitcomestoamenitiessuch asaccessto elevators,publicbathrooms,andinformationbooth.Commuterssuchasoldagepeople,familytravelingwithinfants,and physicallychallenged peopleneedtheseinformationinadvancetoplantheirtrip efficiently.

4.Consideringtheabovepainpointsthatljustmentioned,herearefewfeature/usecasesthatGoogleMapscanoffertodelightthe commuters

1.Personalizedreal-timenotificationtocommuterwhenthereisinterruptionintheservice(thisisespeciallyusefultopeople commutingdailysayfromhometoofficeand back).
2.Book uber/ lyft for commuter, to the nearest alternate train/bus station, so that they can reach their destination on-time.
3.Train/busstationinformationcatalogshowingallamenitiesandcontactinformation.Thecatalogshouldgetupdatedonregular interval
4.Collaboration platform that will categorize station based on people input on incidents such as number of theft, people fallen on track, people got stuck in between train and platform, or even broken machine.

Example: HowwouldyouimproveGoogle Maps?(Continued)

Prioritizethe solutions acrossthe usergoaland complexity of development.

Solution	Impact on User Goal	Complexity
Personalized Real-Time Notifications	High: Provides timely updates on delays or changes in service, allowing commuters to adjust their plans accordingly.	Medium: Google Maps already tracks train delays and congestion, so integrating real-time notifications would be a moderate enhancement.
Book Lyft/Uber for Commuters	Low: NotallcommutersmayfindLyft/Uber affordable or may not have an account with these services. This solution might only be useful for a subset of the commuter population.	Low: Google Maps already offers ride-sharing options as part of its route planning, making this addition relatively straightforward.
Information Catalogue	High: Providing current and accurate information about stations helps commuters effectively plan their trips.	Medium: While setting up the initial catalogue is relatively easy, maintaining up-to-date and accurate information requires ongoing effort.
Train/Bus Station Ratings	High: Reviews from other commuters build trust and provide valuable insights into station facilities and services.	High: Developing a feature for collaborative updates and ratings in Google Maps involves significant effort to enable user contributions and manage the information.

Based on the table, the two features that deliver the greatest impact with the least effort are (a) personalized real-time notifications and (b) the information catalog. Therefore, it is recommended to prioritize the implementation of these two solutions.

Q2.Whatisyourfavouriteproduct? Why?

1. Describetheproduct

2. Answerthefollowing:

a.Useful-Is the productusefuland solvinga keypainpoint?

b.Efficient-Is the productsolvingtheissuequickerwith lesseffortfromthe user

c.Innovation-Is theproductsolvingtheuser problem inanewwaythatmakestheusersmarter

My favorite product is Google Maps because it is exceptionally useful, innovative, and efficient. It provides a wealth of information—from navigation and real-time traffic updates to discovering local businesses and points of interest. Its innovation lies in its ability to integrate various data sources into a single, user-friendly interface, continually evolving with new features like real-time public transportation updates and indoor maps. Its efficiency is evident in how quickly and accurately it helps me get from point A to point B, find what I need, and make informed decisions while on the go.

Q3. How do you define a successful product?

A successful product is one that meets the needs of its target users and achieves its business objectives. This can be measured through key performanceindicators(KPIs)such as user adoption rates,customer satisfactionscores, revenuegrowth, and marketshare.Successalsoinvolves delivering value to users, aligning with the company's strategic goals, and maintaining a competitive edge in the market.

Q4. How do you define a successful product

I managed the development of a mobile app for a retail client aimed at enhancing the in-store shopping experience. My approach involved:

Discovery: Conducted user research and competitor analysis to identify pain points and opportunities.

Planning: Defined clear objectives, created a product roadmap, and established success metrics.

Development: Worked closely with engineering, design, and marketing teams to build and iterate on the product.

Testing: Implemented a beta testing phase to gather user feedback and refine features.

Launch: Coordinated the launch strategy with marketing, monitored performance, and made data-driven adjustments post-launch.

Q5.How do you prioritize features for a product roadmap?

I use a combination of prioritization frameworks like the Eisenhower Matrix and MoSCoW method, along with stakeholder input and data analysis. Key factors include:

Customer Impact: Features that address critical user needs or pain points.

Business Value: Alignment with strategic goals and potential for revenue growth.

Effort and Resources: Technical feasibility and resource availability.

Data: User feedback, market research, and performance metrics.

Q6. How would youa createa new product?

•Identify theProblem: Determinethecore issueorneedthatrequires addressing.

•Validate with Potential Users: Confirm the problem's significance by engaging with potential users to gather feedback and insights.

•Discuss Your Prioritization Methods:

•Prioritize Features: Rank features to focus on for the Minimum Viable Product (MVP), balancing user needs, business goals, and development effort.

•Walk Through How You Would Document Requirements:

•Document Requirements: Capture and illustrate product requirements using wireframes or other documentation tools to ensure clarity and alignment.

•Explain How You Work with Other Teams to Build the Product:

•Collaborate with Teams: Describe the methodologies and processes used to work effectively with cross-functional teams, including engineering, design, and marketing, to develop the product.

•Discuss Your Launch Plan and How You Would Track Success:

•Launch Plan Structure: Outline a high-level strategy for the product launch.

•Track Success: Explain the metrics you will use to measure the product’s success and evaluate its performance post-launch.

Q7. What key performance indicators (KPIs) do you use to track product success?

UseavarietyofKPIs dependingon the product'sgoals,including:

- User Engagement: Metrics like daily active users (DAUs) and session length.
- Customer Satisfaction: Net Promoter Score (NPS) and customer feedback.
- Revenue Metrics:Average revenue per user (ARPU) and conversion rates.
- Retention Rates: Churn rate and user retention over time.

Q8. Questionon Product/BusinessStrategy

When developingaProductStrategy,considerboththeMicro (Product) level and the Macro (Business Strategy) level. Strategies to explore include:

- Increasing Addressable Market: Expand the market reach of your product to attract more users.
- Synergizing Products: Combine products to offer a more comprehensive solution and enhance user value.
- Entering New Markets: Explore opportunities to introduce your product into new geographic or demographic markets.
- Reducing Reliance on Key Partners: Decrease dependency on crucial partners by developing internal capabilities.
- Bringing Core Competency In-House: Move essential functions or expertise from external partners to internal teams.
- Developing Cost Leadership: Focus on becoming the lowest-cost provider in your industry.
- Diversifying: Expand your product offerings to mitigate risks and capture new revenue streams.
- Building Barriers for Competitors: Create competitive advantages that protect your market position.
- Developing Resources (Data) for Potential Markets: Leverage data to identify and serve new market opportunities.
- Alignment with Core Strategy: Ensure that your product strategy aligns with your overall business strategy.

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Additional Resources

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Reading List

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