AI PRODUCT MANAGEMENT 2 · DETAILED COURSE

Product Metrics and Business Analytics

The metrics that describe product health and business performance, and how to read and review them.

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CHAPTER 08

Product Metrics and Business Analytics

The metrics that describe product health and business performance, and how to read and review them.

Product KPIs

A small set of measures tied to goals that show whether the product is succeeding.

Product KPIs are a small set of measures tied to goals that show whether the product is succeeding. Pick five or fewer, and define each one precisely, including the numerator, denominator, time window and filters.

North Star Metrics

The one measure of delivered customer value that guides the whole team, supported by input metrics.

The north star is the one measure of the value customers receive, such as completed bookings per week for a travel app. It should lead revenue and be supported by input metrics the teams can influence.

Acquisition Metrics

How users arrive: visitors, signups, cost per acquisition and channel conversion.

Acquisition metrics show how users arrive: visitors, signups, cost per acquisition and conversion by channel. Compare channels on the quality of the users they bring, not only the volume.

Activation Metrics

Whether new users reach the first moment of value, such as completing a key action.

Activation measures whether new users reach their first moment of value, such as sending a first invoice. Define the activation event from data showing which early actions predict long-term retention.

Engagement Metrics

How deeply and often users use the product: sessions, actions, time in product, stickiness.

Engagement measures how deeply and often users use the product: sessions, key actions, time in product and stickiness. Engagement should be tied to value, because time spent alone can reflect confusion.

Retention Metrics

The share of users or revenue that remains over time.

Retention is the share of users or revenue that remains over time. Report it by cohort and over several time periods, so changes in product quality are visible.

Revenue Metrics

Revenue, ARPU, expansion and contraction, margin and bookings.

Revenue metrics include total revenue, average revenue per user, expansion and contraction, margin and bookings. Separate recurring and one-time revenue to see the health of the subscription base.

Customer Satisfaction Metrics

Direct measures of how customers feel about the product or interaction.

These capture how customers feel about the product or an interaction. Satisfaction is a lagging signal, so pair it with behavioural metrics to see whether opinions match actions.

NPS, CSAT and CES

NPS asks likelihood to recommend; CSAT rates satisfaction with an interaction; CES measures how easy a task was.

NPS asks how likely people are to recommend the product, CSAT rates satisfaction with an interaction, and CES measures how much effort a task took. Use CES after support interactions and NPS for relationship health.

DAU, WAU and MAU

Daily, weekly and monthly active users; DAU/MAU indicates stickiness.

Daily, weekly and monthly active users count distinct users. The DAU/MAU ratio indicates stickiness. A product used once a month needs different measures than one used every day.

ARPU and ARPPU

Average revenue per user and per paying user.

ARPU is average revenue per user across all users, and ARPPU is average revenue per paying user. Comparing them shows how much of the change comes from conversion to paid versus price or upsell.

Customer Lifetime Value (LTV)

Expected gross profit from a customer over their lifetime, from average revenue, margin and lifespan.

LTV is the expected gross profit from a customer over their relationship with the product. A simple version multiplies average monthly gross profit by average lifespan in months. Use it with CAC to decide how much acquisition spending is sustainable.

Customer Acquisition Cost (CAC)

Total sales and marketing spend divided by customers acquired in the period.

CAC is total sales and marketing spend divided by the number of new customers acquired in the same period. Track it by channel, and be clear about whether it includes sales salaries.

LTV/CAC Ratio

Return on acquisition spend; around 3 or higher is often a healthy target for subscription businesses.

LTV divided by CAC shows the return on acquisition spending. A ratio around 3 is often cited as healthy for subscription businesses, but the benchmark depends on payback period and cash position.

Monthly Recurring Revenue (MRR)

Predictable subscription revenue normalised to a month.

MRR is predictable subscription revenue normalised to a month. Track its components: new, expansion, contraction and churned MRR. The movement between them explains growth or decline.

Annual Recurring Revenue (ARR)

Predictable subscription revenue annualised, typically MRR x 12.

ARR annualises recurring revenue, typically MRR multiplied by 12. It is useful for comparing subscription businesses, but it must exclude one-time fees and be defined consistently.

Churn and Retention Rate

Churn is the share lost in a period; retention is the share kept, and the two sum to one.

Churn is the share of customers or revenue lost in a period, and retention is the share kept. They sum to 100% over the same base. Report logo churn and revenue churn separately, since large customers can distort revenue figures.

Feature Adoption

The share of eligible users who try and keep using a feature.

Feature adoption is the share of eligible users who try a feature and keep using it. A launched feature used by 2% of users after three months needs investigation into discovery, value or fit.

Product Health Metrics

A balanced set: reliability, performance, quality, support load, satisfaction and usage.

A balanced set includes reliability, performance, quality, support load, satisfaction and usage. Health metrics warn of problems before growth metrics decline.

Product Performance Reviews

A regular forum to read metrics, explain changes, agree actions and adjust the roadmap.

A regular review reads metrics, explains changes, agrees actions and adjusts the roadmap. Each review should end with named owners and dates for the actions it creates.

Summary of terms

Term	Meaning
Product KPIs	A small set of measures tied to goals that show whether the product is succeeding.

North Star Metrics	The one measure of delivered customer value that guides the whole team, supported by input metrics.
Acquisition Metrics	How users arrive: visitors, signups, cost per acquisition and channel conversion.
Activation Metrics	Whether new users reach the first moment of value, such as completing a key action.
Engagement Metrics	How deeply and often users use the product: sessions, actions, time in product, stickiness.
Retention Metrics	The share of users or revenue that remains over time.
Revenue Metrics	Revenue, ARPU, expansion and contraction, margin and bookings.
Customer Satisfaction Metrics	Direct measures of how customers feel about the product or interaction.
NPS, CSAT and CES	NPS asks likelihood to recommend; CSAT rates satisfaction with an interaction; CES measures how easy a task was.
DAU, WAU and MAU	Daily, weekly and monthly active users; DAU/MAU indicates stickiness.
ARPU and ARPPU	Average revenue per user and per paying user.
Customer Lifetime Value (LTV)	Expected gross profit from a customer over their lifetime, from average revenue, margin and lifespan.
Customer Acquisition Cost (CAC)	Total sales and marketing spend divided by customers acquired in the period.
LTV/CAC Ratio	Return on acquisition spend; around 3 or higher is often a healthy target for subscription businesses.
Monthly Recurring Revenue (MRR)	Predictable subscription revenue normalised to a month.
Annual Recurring Revenue (ARR)	Predictable subscription revenue annualised, typically MRR x 12.
Churn and Retention Rate	Churn is the share lost in a period; retention is the share kept, and the two sum to one.
Feature Adoption	The share of eligible users who try and keep using a feature.
Product Health Metrics	A balanced set: reliability, performance, quality, support load, satisfaction and usage.
Product Performance Reviews	A regular forum to read metrics, explain changes, agree actions and adjust the roadmap.

Practice exercise: Define a north star and five input metrics for a product, with exact formulas and the guardrail for each.

Self-check

1. Explain Product KPIs in two sentences to a non-technical stakeholder, then say what you would measure for it.
2. Explain ARPU and ARPPU in two sentences to a non-technical stakeholder, then say what you would measure for it.
3. Explain Product Performance Reviews in two sentences to a non-technical stakeholder, then say what you would measure for it.

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PRD library: template, framing guide and 120 PRD ideas

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Context window

Context window: what a model can see at once

The context window is the most tokens a model can consider in one request. It covers your prompt, any documents you paste, the conversation so far and the reply. Anything outside it is invisible to the model. For PMs: a longer window fits more material but costs more and can slow responses; put the most important facts near the instructions; use retrieval (RAG) rather than pasting whole libraries; and test answers on long inputs, where quality can drop.

Context engineering course Context windows in the AI PM 2 course

Tokens and context in the Grokbot course

AI-First Product Management

Resources for Product Managers

The PM Master Handbook, AI and product tools with their official websites, interview practice, a frameworks cheat sheet, a PRD template and free courses.

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Product Core modules

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2Product Strategy and Strategic Thinking*Handbook chapter, detailed PDF, handbook and class slides*PDF Detailed PDF Handbook Class Slides
3Problem Discovery and Market Research*Handbook chapter, detailed PDF, handbook and class slides*PDF Detailed PDF Handbook Class Slides
4Problem Framing and Prioritization*Handbook chapter, detailed PDF, handbook and class slides*PDF Detailed PDF Handbook Class Slides
5UX and Design Collaboration*Handbook chapter, detailed PDF, handbook and class slides*PDF Detailed PDF Handbook Class Slides
6Effective Communication and Stakeholder Management*Handbook chapter, detailed PDF, handbook and class slides*PDF Detailed PDF Handbook Class Slides
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AI Tools Lab

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Business AI Stack (chapters 24 to 31)

24The business AI stack: tools and where to learn themPDF ↗ 25Next.js: customer-facing dashboardsPDF ↗ 26Zoho CRM: managing customers and leadsPDF ↗ 27WhatsApp Business Platform: customer messagingPDF ↗ 28Deployment with Vercel and AWSPDF ↗ 29Jira: tracking product and development workPDF ↗ 30Meta Business Suite, social media marketing and Google AdsPDF ↗ 31A one-page website that generates leadsPDF ↗

Complete AI tool guides (15)

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Complete AI tool guides (one PDF, 30 pages) ↗

Libraries

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PM interview practice (free, on the original sites)

Hand-picked public question banks and guides from other PM communities. Each link opens the original page in a new tab.

PM frameworks cheat sheet

Framework	Use it to	How it works
RICE	Prioritise a backlog	Reach × Impact × Confidence ÷ Effort. Score each idea, then sanity-check the ranking.
Kano	Decide which features delight	Classify features as Must-be, Performance, Attractive, Indifferent or Reverse using a short survey.
MoSCoW	Scope a release	Must have, Should have, Could have, Won't have (this time).
Jobs-to-be-done	Understand motivation	When [situation], I want to [motivation], so I can [outcome].
AARRR (Pirate metrics)	Map the growth funnel	Acquisition, Activation, Retention, Referral, Revenue.
HEART	Measure user experience	Happiness, Engagement, Adoption, Retention, Task success, each with goals, signals and metrics.
North Star metric	Align the team	One metric that captures the value users get, supported by input metrics the team can move.
Five whys	Find the root cause	Ask 'why?' repeatedly until you reach a cause you can act on.
CIRCLES	Answer product design questions	Comprehend, Identify users, Report needs, Cut through prioritisation, List solutions, Evaluate trade-offs, Summarise.

PRD template

PRD: [Feature name] Owner: [Name] · Status: Draft · Last updated: [Date] 1. Problem Who has the problem, what it is, and the evidence (data, interviews, tickets). 2. Goal and success metrics Primary metric (with baseline and target), secondary metrics, guardrails. 3. Users and use cases Target segment, top 3 user stories: "As a [user], I want [action] so that [benefit]." 4. Solution What we'll build (link designs), what's out of scope, open questions. 5. AI behaviour (if applicable) Inputs, model, prompt/approach, what it must never do, human review, evaluation set and pass criteria, cost per request. 6. Launch plan Experiment design, rollout stages, support and comms, rollback criteria. 7. Risks and dependencies Technical, legal/privacy, operational; owners and mitigations.

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