Main category	Subcategory	y Most common codes Present in sources		Example	
		Being adaptive and flexible	B3, B4, B5, B6, B10, B13, B20	"The best product managers I know are flexible. They do whatever needs to be done. They aligned their priorities with company-wide strategic goals and fill in the white spaces between different roles in their teams to ensure the delivery of successful products. This is especially important for early-stage startups where you can never hire fast enough."	B6
	Qualities	Good communicators	B2, B5, B7, B10, B14, I01	"In the end, there are certain things such as 'good communication with stakeholders' that a product manager has to do well regardless of the size of the company they are in or the phase of the product lifecycle."	B5
		Empathy	B1, B4, B16, B17, B19, I01	"After joining Oscar as a product manager, I noticed that I spiked high against my peers on user research and user empathy."	B16
		Creativity	B3, B16, B29	"Being test-driven and data-informed does not mean being uncreative in how you build product—to the contrary, effectively testing and using data requires that you have the creativity and risk threshold necessary to []"	B29
Product Manager		Hands on	B3, B14, B25	"'Delegation' is not in your vocabulary and this is a good thing. From user research, prototyping, customer support, analytics, copywriting, you'll be doing it all or at least heavily involved. Being hands on in every aspect of the product or a feature puts you in a much better position to make decisions, so see it as a good thing. It is the main reason why I love this job."	B25
ot Ma	Role	Generalist, multidisciplinar role	B1, B2, B3, B4, B7, B8, B9, B17, B22, B27, I04	"Product Management is definitely a role suited for the generalist as it requires balancing different timelines, vectors of work and competing priorities."	B22
onpo.		Ill-defined role	B4, B6, B7, B10, B13, B15, B18, B25, I02, I03	"Not everyone has the same idea of what a product manager does, []"	B18
Ğ		Accountable for the product - Mini-CEO	B7, B9, B13, B19, B21, B22, I02	"In fact, Product Managers are often called the mini-CEO, as they are, indeed, responsible for every aspect of a product and are generally a jack-of-all-trades."	B7
	Way of working	Data and feedback driven	B4, B5, B11, B13, B16, B18, B19, B20, B21, B23, B24, B27, B28, B29, B30	"You have intuition, and you have your experience, but your notions about what your customers want—they're just notions. They're not true or false until you put them to the test."	B29
		Intuition	B1, B5, B11, B16, B18, B21, B29	"This may sound generic or cliche, but if you care about your users and are passionate about the problem you're solving, then a lot of times you need to follow your gut."	B11
		Speed in startups	B5, B8, B21, B27, B29, I03, I09	"You're in a fast-paced rocketship Speed is key here. One of the first things you'll notice is that everything is moving fast — you want to come up with new ideas fast, you want to validate fast, you want to ship fast and learn fast."	B8
		Trust others	B4, B10, B13, B16, B19, B21, I01	"trusting developers to figure out the How"	B19
	Background	Background on technology	B2, B4, B7, B10, B14, I01, I03, I06, I07, I08, I09, I10	"Up until that point I'd been a software engineer my entire professional life, so I had no real idea of what product management was"	B14
		Background on business	B1, B3, B4, B7, B14, B19, I01, I02, I04	"It's been slightly over a year since I've joined Phenotips, first in a part-time capacity for 5-months, while I was getting my M.B.A., and then in a full-time capacity for the past 8-months."	В3
egpe		Background on design	B1, B4, B7, B17, I05	"For designers that considered moving from Product Design to Product Management, these are some tips I learned along the way that has helped me greatly in my transition towards a product management role."	B17
Knowle		Broad knowledge	B1, B4, B5, B7, B17, B22, B23, I02, I04, I06, I07, I09, I10	"When I started Fresh Tilled Soil, I did bookkeeping, sales, marketing and design. I'm really glad I did because now I know what it takes to craft an experience, or design a dozen screens for a complex UI, or manage cash flow in the lean months"	B23
Background & Knowledge		Continuous learning	B1, B4, B5, B6, B10, B11, B16, B17, B25, B27, I01, I05	"Although they may not have 100% of the skills and knowledge at the famous intersection between usability/design and business and technology, this can be developed over time."	B4
	Knowledge	Knowledge about business	B1, B2, B5, B7, B19, B20, I01, I06, I07, I09, I10	"And also even though my background is software engineering, I read double into a lot of things because I'm, you know, like people do the T shaped thing, so I have my specialty which is software engineer, obviously, but I dabble into: lean startup, product management, design thinking, Customer [inint] design and so on, so, for example"	107

	Knowledge on technology	B2, B4, B7, B10, B16, B17, I01, I02, I04, I05	"Getting this to happen means understanding the technology behind your product, which will not only help in ' supporting your team of developers or engineers, but will also help with communicating with other parts of your business, and investors."	B2
	Knowledge on design	B1, B4, I02, I04, I09	"Being a Product Manager without having a sense of design doesn't usually work."	B4
	Prioritization	B1, B3, B4, B5, B7, B10, B13, B17, B18, B19, B20, B21, B25, I01, I02, I03, I05, I06, I07, I10	"Prioritizing the actions you will execute, week after week, or sprint after sprint"	102
	Decide features to build	B1, B2, B3, B5, B11, B15, B19, B26, I08, I09, I10	"I'll say it again: product management is often about knowing when to say no. You don't want to tie up valuable dev resources building features no one will use."	B1
Software product development	Create specifications	B15, B18, B20, B22, I01, I03, I05, I07, I08	"Ensuring that user stories get written for all development work can therefore be a fundamental culture change. It's well worth the effort of course, and in our case we found a few weeks were all it took until consistent issue tracking was second nature."	B18
	Own the product roadmap	B4, B7, B11, B18, B19, B20, I08, I10	"Create and maintain the product roadmap"	B7
	Gather ideas and requirements	B15, B20, B24, B26, I02, I03, I10	"Part of a product's life cycle and management is to gather ideas and feedback."	B24
	Understand technical constraints	B3, B7, B17, B21, I01	"Due to the fact that a Product Manager is essentially responsible for the product delivery, she/he should work closely with the CTO, defining the technical feasibility and constraints,"	B7
	Own the product vision	B1, B2, B4, B7, B15, B18, B19, B21, B23, B24, B27, B28, I03, I04, I07, I08	"So i'll start from the top, so the top is the responsibility for product strategy and product vision, as a person as a product team like they they have multiple people there right? There, the shared responsibilities this product vision, product strategy, so looking long term."	107
Business	Balance user and business	B6, B7, B13, B21, I02, I03, I04, I06, I10	"Here you have only it's not only the technical part but also the business part it makes sense for the for the user and for the one it brings value for the user make him happier or buy"	I10
	Position within and monitor competition	B7, B20, B22, B27, I02, I08	"Understand the market and competitors"	В7
	Think strategically	B6, B10, B15, B19, I02, I03	"Make sure that you are not just blindly filling the white spaces but also thinking about what the company may need to grow to the next stage and drive the team forward."	B10
User Experience	Understand users and customers	B1, B2, B3, B4, B5, B7, B11, B13, B16, B21, B23, B25, B28, B29, I01, I02, I03, I04, I06, I07, I09, I10	"If you commit to fully understanding the problem you're fixing and set that as your north star, then if your first attempt at a solution doesn't stick, you have uncovered something that can lead you to the actual solution."	B25
and Design	Gather users' feedback	B1, B2, B4, B10, B11, B17, B20, B21, B24, B27, B28, B29, B30	"So How Important is Client Feedback for Product Managers? Extremely. We find that our users always have the best answers — sometimes they validate what we think and other times they give us new directions to look at."	B20
	Being the bridge	B1, B2, B3, B4, B7, B10, B13, B14, B16, B17, B19, B21, B22, B27, B28, I02, I04, I05, I06, I07, I08, I09	"[] because rather than generating consensus, the PM generates bridges of communication between stakeholders, keeping the focus on what is really important."	B4
Communicati	Work close to founders and management	B2, B7, B10, B18, B27, B28, B30, I01, I03, I08	"The product manager has to take what is happening on the ground with the product team, simplify it, and communicate the essence to management and stakeholders."	B2
n	Communicate with other teams	B3, B4, B18, B27, B28, I02, I05	"Let people know what is happening within your product. Present numbers, tell them what the numbers are telling you. Why we are building version two of something or why we are not? Why we must fix that annoying bug and why we are tightening deadlines? Explain it all. When I started, I explained everything I do in a day to the rest of the team."	B27
	Work close to tech leader	B4, 102, 104, 105, 108, 109	"But I don't go to the details, where which like how is this is going to be solved, I think our technical lead handles that."	109
	Communicate the vision to the team	B2, B19, B23, B28, I04	"product manager guides the team to achieve the product vision."	B19

	Leadership	Build trust and relationships	B1, B4, B6, B9, B10, B13, B17, B21, B27, B28, I01, I04, I06	"That's why it's extremely important to build trust and get buy-in not only from management but from the entire team"	B10
		Understand and support other teams' work	B3, B13, B16, B17, B18, B22, I04	"A PM needs to understand how designers work and be able to establish research plans, run usability sessions, customer interviews and facilitate design critiques."	B22
	Management	Facilitate the team's work rhythm to keep rhythm	B2, B4, B6, B10, B13, B14, B17, B18, B20, B21, B26, B27, B28, I01, I02, I04, I08	"What is your main function? You have to take things blocking the guys so the guys can work right, you pay the guys so they can work right."	101
		Process definition	B2, B8, B10, B17, B18, B21, B23, B27, I01, I04, I05, I07	"I then created a PM process document that I go back and look at very often."	B27
		Coordinate team of engineers and designers	B6, B7, I02, I03, I04, I06, I08	"you need to coordinate a multidisciplinar team of engineers and designers"	102
		Process improvement	B10, B21, B24, B28, I01	"Inevitably adding processes can slow things down and in an environment that needs constant adapting and pivoting, it's logical that we delay this until it is deemed completely necessary."	B21
	Context	Dependence on the company and team	B3, B9, B10, B13, B18, B21, I02, I07	"There's no one-size-fits-all approach."	B10
S		Dependence on context	B4, B7, B13, B15, B16, B18, I05	"As a Product Manager your roles and responsibilities will change depending on your context and the stage of your product."	B15
Dependencies	Stage	Early stages - founder or CEO as product head	B1, B2, B3, B4, B7, B10, B12, B16, B19, B23, B24, B25, B28, I03, I06, I08, I10	"Just figured out you're a product manager? Go you! Like most early stage startup PM's I cofounded a startup and discovered later down the line that all the stuff I've been doing was in fact Product Management/Product Design(Who knew?)"	B25
Dep		Dependence on product and company stages	B3, B5, B6, B10, B12, B13, B15, I04	"As you've probably already noticed, the actual jobs for first PMs constantly shift. My scope and responsibility changes every few months. When a group of product managers get together, I am often amazed by how different product management can be at different stages of the company and for different types of products and customers."	B10
		PM emerges as the startup grows	B3, B4, B12, B18, B24	"As startups scale, however, most do add product managers to help them deal with increased complexity."	B18
	Product	Changing specifications and roadmap	B5, B8, B10, B11, B13, B17, B20, I04	"I've also been a part of startup teams whose priorities have changed overnight based on an announcement made by their partners or their competitors."	B5
		Hard to balance all stakeholders	B1, B3, B4, B17, B28, I01	"The more I got involved in the product development process, the harder it was to make a decision that balances the needs of all the stakeholders."	B17
	Context	Time and resources constraints	B3, B6, B9, B10, B11, B21, B25, B27, B28, I09	"I didn't realise that being a PM was going to be so hard. It's even harder when you are a PM in a small startup with limited resources and time."	B28
S		Lack of established processes	B2, B3, B8, B9, B10, I03, I05, I07	"We didn't have any documentation, processes, or guidelines to refer to."	B10
Challenges	Knowledge	Lack of knowledge on other fields	B14, B17, B25, I03, I09, I10	"And looking back, I was really bad at it. I knew very little about managing up, keeping scope in check, leading teams within a larger org, and basically everything else a PM should know"	B14
a		Different language to communicate	B17, I05	"So, the language I have to use is different"	105
Ch		Risk of focusing on own expertise	B23, B27, I06, I07, I10	"You have to remember no matter what role you made this transition from, you have left that job behind you. If you were a developer, designer, founder it not longer applies to you."	B27
	Role definition	Blend of art and science	B1, B13, I10	"And I was I didn't know like how distorted it gets, so that that was like a shock, like the distance between what is claimed, and what it exists, so that was something that I had to get used to and then As a scientist or having also science, science background where things have to be like properly done. This kind of ad-hoc way of working like anything goes yeah like as long as you go you achieve the goal that was something or so that requires some adaptation."	l10
	Teamwork	Lack of authority over others	B4, B13, I01, I02	"PMs have no direct power; they win people over with reason and results. PMs have no direct power meaning engineers do not report to them."	B13

ences	Shape the future of the startup	B9, B10	"Being the first product manager is challenging but it also means that you will have a tremendous opportunity to shape the future of the company"	B10
nsedne	Developers have less control over features	B18	"The addition of product managers can feel disempowering: developers suddenly have less control over feature definition and priority"	B18
Ö	Stakeholders have less access to developers	B18	"while stakeholders have less access to the developers who solve their problems."	B18