**The Product Manager Note**

1. What are the PM responsibilities?

1)defining the new product to be built .

2)manageing its development, launch, and ongoing improvement.

1. Describe the product team and organization structure?

The product team includes, in addition to a PM, representatives from engineering, UX design, project management, and product marketing.

In addition to product team members from the organizational units listed above, product managers frequently will interact with colleagues from sales, business development, and customer service.

1. How PM role and product organizations differ based on company size, product focus and other differences?

1)Startups versus More Mature Companies

As a startup, its product team will struggle with several typical trade-offs. In a fast-growing mid-stage enterprise, the PM must also cope with the resource constraints of a start-up on the one hand, and with the inevitable political friction and bureaucratic coordination demands brought about by the expansion of the organization on the other.

In more mature companies, the product development process is often well established and understood. Project managers will also have more resources to get customer feedback, optimize the design, and promote the product.

2)Enterprise (B2B) versus Consumer Focus (B2C)

An important task for PMs is to determine which features requested by early adopters can be sold to other customers and which are specific or customized to a single account. The challenge for PM is very different for consumer products, where PMs must ensure that the products they design have mass appeal, keep them simple and clear, and in many cases incorporate elements into the product to make it easier to spread.

3)Level of Decision-Making Centralization

When a founder is very product oriented, the company gives product managers a greater degree of autonomy in choosing product features, and senior executives only weigh in on major decisions. Once a central decision maker sets a product roadmap, there is usually a high degree of organization around product priorities, and the resources needed to achieve them are easily available.

4)Scale of Deployments

Companies launch more complex products, usually for corporate customers, and large, complex products tend to be built in large, complex organizations, so PM will spend more time planning and coordinating activities.

5)Development Philosophy

In agile development, the PM assumes the role of "product owner," working with other members of the cross-functional team, ready to answer developers' questions about expected product functionality. In contrast, with waterfall planning, PMS spend more time specifying product requirements in formal documentation, and while they interact frequently with developers, they are less likely to co-locate with developers.

6)Business versus Engineering Emphasis

Typically, business-oriented executives assemble a product team focused on achieving business goals -- a team that prioritizes products with a more immediate, measurable financial impact and a more predictable development process. Engineering-oriented managers are more likely to build product teams that pursue elegant and ambitious technical solutions and give engineers more autonomy. While this approach can also lead to over-engineering - creating products with more features than the market demands.

1. What are the attributes of strong PMs?

1)The ability to influence and lead ：

The product manager must be able to exert influence over the entire organization with little formal authority. First, she must earn the respect of the engineering team and drive the thinking of technical design.Then, she must negotiate with the sales executive to determine which features will be prioritized and which potential customers should avoid because of their specific needs. Finally, she must convince the company's top leaders to approve the product strategy and allocate adequate resources.

2)Resilience and tolerance for ambiguity ：

Product managers often have to make tough decisions and pursue ambitious goals with limited resources and incomplete information. Even the best project managers often make bad decisions. Thus, PMS must be willing to face the prospect of highly visible failure and do so under uncertain conditions, even if they lack the explicit authority of the founder.

3)Business judgment and market knowledge ：

In order to make good business judgments, a PM must have a keen sense of the market and a deep understanding of customer needs and pain points. They need to keep up to date with industry trends, attend conferences, and read blogs. The best product managers often talk to their customers and therefore understand and empathize with their pain. Channel the customer's voice and give the product manager credibility to advocate for priorities that may run counter to the preferences of other managers.

4)Strong process skills and detail orientation ：

A good product manager has a great ability to shift perspective and to juggle the big picture with the small details. She can keep her focus on product vision, strategy, and ROI, but when appropriate, shift her focus to key details that have a significant impact on product performance. Whether strategic or tactical, a strong project manager insists on getting the right data and analyzing it in a rigorous way.

5)Fluency with technology and its implications on product design and business ：

Product managers come from different educational backgrounds, but they are all familiar with technology. Product managers without a background in computer science or engineering must still understand the pros and cons of technology decisions and work with engineers to solve technical challenges.

6)Design/UX instincts ：

The best project managers are good at developing models and wireframes quickly, and they are very design-sensitive and can skip unnecessary steps.

1. What are the key principles of agile development?

Individuals and interactions over processes and tools

Working software over comprehensive documentation

Customer collaboration over contract negotiation

Responding to change over following a plan