



Software Product Management

Team & People aspects

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Product Team roles

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(Book: Inspired)

Key roles:

- Product Manager
- Designer
- Engineer
- Product Marketing

Product manager

- Overall in-charge of product
- Drive product from concept to development to continuous evolution
- Work closely with UX & Engineering
- Possesses
 - Technology sophistication: knowledge, trends, applications
 - Deep customer knowledge their issues, pains, desires, how they think, how they work, and how they decide to buy.
 - Market & Industry knowledge: competitors, technology trends, understanding the role of social media for your market and customers, trade magazines, conferences

Designer

- Understands user personas, customer journeys
- Design UX
- Carry out usability testing
- Design for accessibility

Engineer

- Architect the solution
- Develop Proof-of-concept
- Use Agile, DevOps
- Carry out A/B testing

Product marketing

- Understand customer segments & size
- Positioning, messaging, Go-to-market plan
- Measure impact of market campaigns

Principles of strong product teams

(Book: Inspired)

- Missionaries: Need teams committed to solving problems for their customers
- They are empowered to figure out the best way to meet those objectives, and they are accountable for the results
- Team size: Around 8–12 engineers two-pizza rule
- True collaboration no hierarchy
- Preferably co-located
- Scope well defined: For example, you might be working on a team at eBay that's responsible for detecting and preventing frauds
- Team duration: It takes time to get to know one another, and learn how to work well together. So, teams should stick together longer
- Team autonomy: they are able to try to solve the problems they are assigned in the best way they see fit.

Case study – Stages in Team development

SNAPSHOT FROM PRACTICE

"Rat Fax" Galvanizes ELITE Team at Newspaper*



Knight-Ridder's *Tallahassee Democrat*, like many American newspapers in the late 1980s, was struggling to survive in the face of declining revenues. Fred Mott, the general manager

of the *Democrat*, was convinced that the key to the newspaper's future was becoming more customer-focused. Despite his best efforts, little progress was being made toward becoming a customer-driven newspaper. One area that was particularly problematic was advertising, where lost revenues due to errors could be as high as \$10,000 a month.

Fred Mott decided to create a team of 12 of his best workers from all parts of the newspaper. They became known as the ELITE team because their mission was to "ELIminate The Errors." At first the team spent a lot of time pointing fingers at each other rather than coming to grips with the error problems at the newspaper. A key turning point came when one member produced what became known as "the rat tracks fax" and told the story behind it. It turns out a sloppily prepared ad arrived through a fax machine looking like "a rat had run across the page." Yet the ad passed through the hands of seven employees and probably would have been printed if it had not been totally unreadable. The introduction of this fax broke the ice, and the team started to admit that everyone—not everyone else—

was at fault. Then, recalls one member, "We had some pretty hard discussions. And there were tears at those meetings."

The emotional responses galvanized the group to the task at hand and bonded them to one another. The ELITE team looked carefully at the entire process by which an ad was sold, created, printed, and billed. When the process was examined, the team discovered patterns of errors, most of which could be attributed to bad communication, time pressures, and poor attitude. They made a series of recommendations that completely transformed the ad process at the *Democrat*. Under ELITE's leadership, advertising accuracy rose sharply and stayed above 99 percent. Lost revenues from errors dropped to near zero. Surveys showed a huge positive swing in advertiser satisfaction.

The impact of ELITE, however, went beyond numbers. The ELITE team's own brand of responsiveness to customer satisfaction spread to other parts of the newspaper. In effect this team of mostly frontline workers spearheaded a cultural transformation at the newspaper that emphasized a premium on customer service.

* Jon R. Katzenbach and Douglas K. Smith, *The Wisdom of Teams* (Boston: Harvard Business School Press, 1993), pp. 67–72. Copyright McKinsey & Co., Inc.

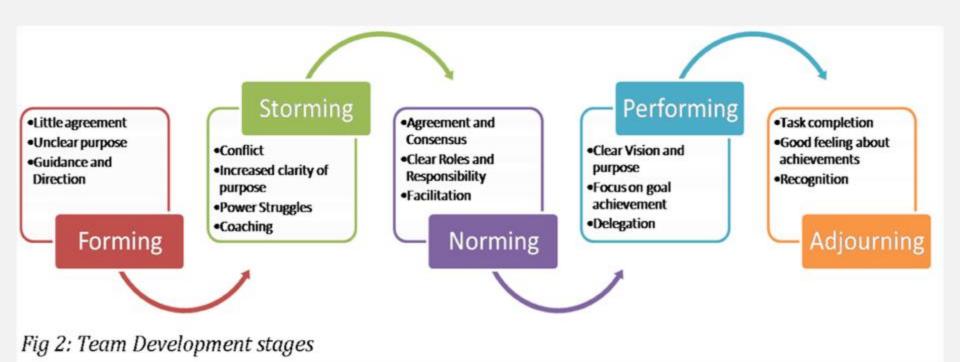
Source: Book: Project Management – A Managerial process, by Erik Larson

'Rat Fax' case study

- What was the problem to be solved?
- How did the meetings go in the beginning?
- How did the team own up responsibility?
- What was the impact of the improvement achieved on other teams?
- What are you experiences in team formation and team maturing?



Different stages of a team



Created by: Psychologist Bruce Tuckman



Why teaming is important?

- The difference in productivity between an average team and a turned-on, high-performing team is not 10 percent, 20 percent, or 30 percent, but 100 percent, 200 percent, even 500 percent! —Tom Peters, management consultant and writer
- An organization succeeds when people trust each other and cooperate with each other

Case study in building a good team

SNAPSHOT FROM PRACTICE

A Good Man in a Storm*



Once upon a time, back in 1976, Data General Corporation needed to come up quickly with a fast, reasonably priced 32-bit mini-computer to compete with Digital Equipment Corpora-

tion's VAX. Data General CEO Edson de Castro launched the Fountainhead Project and gave it the best people and ample resources to complete the 32-bit initiative. As a back-up to the Fountainhead project, Data General created the Eagle project within the Eclipse group under the leadership of Tom West. Work on both projects began in 1978.

In 1980 Data General announced its new computer, featuring simplicity, power, and low cost. This computer was not the Fountainhead from the well-funded "best" DG group but the Eagle from Tom West's under-funded Eclipse team. Tracy Kidder saw all this happen and told the story in *The Soul of a New Machine*, which won a Pulitzer Prize in 1982. This book, which Kidder thought might be of interest to a handful of computer scientists, has become a project management classic.

In the beginning of his book, Kidder introduces the readers to the book's protagonist Tom West by telling the story of him sailing a yacht across rough seas off the coast of New England. Kidder's title for the prologue was "A Good Man in a Storm."

Twenty years after Kidder's book was published Tom West was interviewed by Lawrence Peters for the Academy of Management Executive. Below are some excerpts that capture Tom's views on managing innovative projects:

On selecting team members:

You explain to a guy what the challenge was, and then see if his eyes light up.

On motivating team members:

... Challenge was everything. People, especially creative technical people who really want to make a difference, will do whatever is possible or whatever is necessary. I've done this more than once, and I've repeated it over and over. It seems to work.

On the importance of having a vision:

... you've got to find a rallying cry. You need to have something that can be described very simply and has that sort of ring of truth to an engineer that says "yes that's the thing to be doing right now." Otherwise you're going to be rolling rocks up hill all the time.

On the role of being a project manager:

You have to act as a cheerleader. You have to act as the instructor. You have to constantly bring to mind what the purpose is and what's moving the ball towards the goal post, and what's running sideways, and you have to take up a lot of battles for them. I mean you really don't want your design engineer arguing with the guy in the drafting shop about why he ought to do it the designer's way. I can do that, and I can pull rank too, and sometimes I did just that.

Source: Book: Project Management – A Managerial process, by Erik Larson

^{*} Tracy Kidder, The Soul of a New Machine (New York: Avon Books, 1981); Lawrence H. Peters, "'A Good Man in a Storm': An Interview with Tom West," Academy of Management Executive, Vol. 16, No. 4, 2002, pp. 53–60.

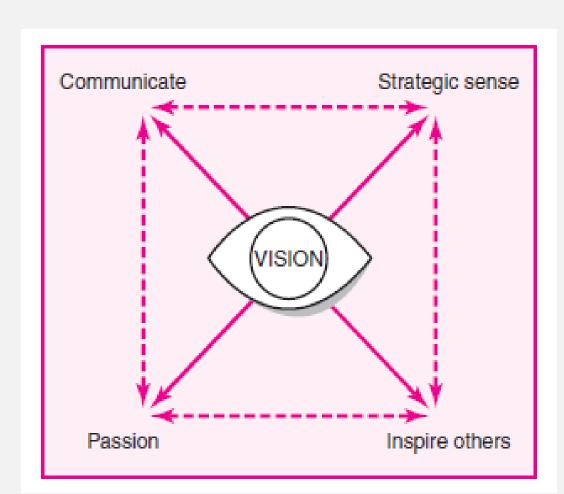
Data General case study

What lessons in team building can we learn from Tom West?

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Creating a good vision

Discuss with all



Something that aligns with the strategy of the org.

Vision should have a higher purpose

Something that excites the team

Ex. The CEO of a pharma company said – let us develop a drug that will eradicate Malaria



Exercise: Defining a vision

 Design a vision / goal for your product / project that will truly inspire the entire team

Characteristics of good teams

(Book: Inspired)

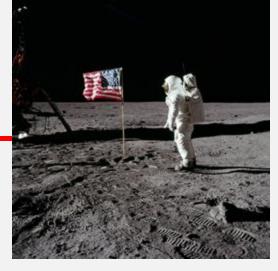
- 1. Good teams have a compelling product vision that they pursue with a missionary-like passion. Bad teams are mercenaries.
- 2. Good teams get their inspiration from observing customers' struggle
- 3. Good teams are skilled in the many techniques to rapidly try out product ideas
- 4. Good teams love to have brainstorming discussions with smart thought leaders from across the company.
- 5. Good teams have product, design, and engineering sit side by side, and they embrace the give and take between the functionality, the user experience, and the enabling technology.
- 6. Good teams engage directly with customers, to better understand their customers, and to see the customer's response to their latest ideas.
- 7. Good teams know that many of their favourite ideas won't end up working for customers.
- 8. Good teams understand the need for speed and how rapid iteration is the key to innovation

Power of a common goal

Apollo 11

- In 1969, Neil Armstrong and Buzz Aldrin became the first men to walk on the moon, a momentous achievement in human history, which is yet to be surpassed.
- While these two men have gone down in history, they wouldn't have made it off the ground without the support of a massive team.
- Over 300,000 men and women collaborated on the Apollo launch, from surveyors to the engineers, to the astronauts themselves.
- Every person that worked on the moon landing understood the goal they were working towards.
- This is best exemplified by President Kennedy's conversation with a janitor when he visited Nasa in 1962.
- When the president asked him what he did, the man proudly replied. "I'm helping to put a man on the moon."

How do you think this must have happened – even the janitor is inspired?







Ref: vouchforme.co

Example of great team work in nature



Look at how the Geese fly:

- Human teams could learn a lot about teamwork by observing Geese.
- Every winter, flocks of Geese take to the skies and work together to achieve their common goal of reaching a warmer climate.
- Common errors with human teams include lack of communication and allowing some members to take all the pressure while others coast through, but flocks of Geese never have these problems.
- As they fly, they honk loudly, motivating their tired teammates, and by flying in a V-shape formation, the leaders reduce air drag for those behind them.
- When the lead Goose is struggling, another one from the back swaps to give their companion a break.
- The result means that all members of the flock work and recover equally.

What can we learn from the geese?

Ref: vouchforme.co

Some aspects of team: Few Questions



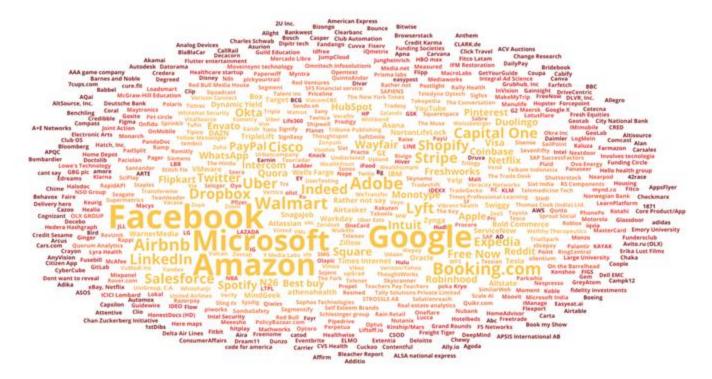
- Do you participate in customer meetings, do you visit the customer?
- How can you deeply understand the customer needs in your product?
- Do you consider different ideas from team members to solve a complex issue?
- How can you bring in a culture of collective problem solving in your team?

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How PM roles different in different companies? A survey(lennysnewsletter.com)

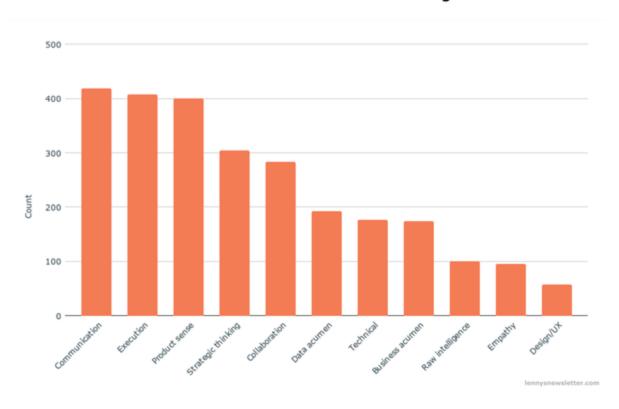
- Survey participants
- Year:

Where they work



Survey results...

What skills are most valued when hiring a PM?

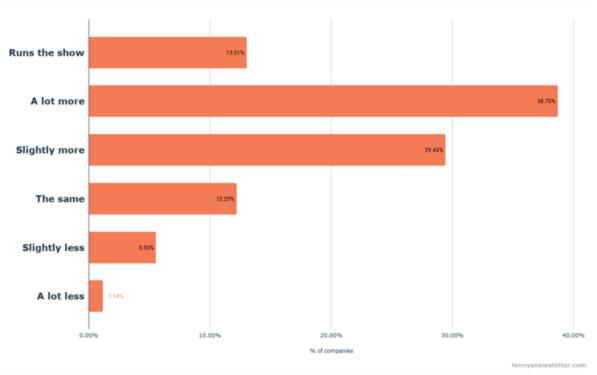


- Most frequently valued: Communication, execution, product sense
- Least frequently valued: Design/UX, empathy, raw intelligence



Survey results...

How much influence do PMs have vs. other functions?



- Noteworthy companies where PMs have a lot more influence: YouTube, LinkedIn, Twitter, Uber, Robinhood, Lyft, Coinbase, Asana, Airbnb
- Noteworthy companies where PMs have relatively less influence: Apple, Oracle,
 Stripe, Tesla

Survey results...

Heart vs. Hands vs. Head

It's often said that companies are defined by how they index on Heart (e.g. empathy, culture) vs. Hands (e.g. execution) vs. Head (e.g. intelligence).

Takeaways:

- Companies who spike on Heart: Asana, Spotify, WhatsApp
- Companies who spike on Hands: Flipkart, Okta, PayPal, Quora, Tesla, Wayfair, Yelp
- Companies who spike on Head: Coinbase, Uber, YouTube, Zynga

To which category does your company largely belong?

What it takes to be a good PM? (hbr.org)

Aspiring PMs should consider three primary factors when evaluating a role:

- Core competencies
- Emotional intelligence (EQ)
- Company fit

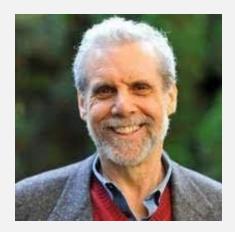
Core competencies

(hbr.org)

- Conducting customer interviews and user testing
- Running design sprints
- Feature prioritization and road map planning
- The art of resource allocation (it is not a science!)
- Performing market assessments
- Translating business-to-technical requirements, and vice versa
- Pricing and revenue modeling
- Defining and tracking success metrics
- Rate yourself on a scale of 1 to 5 on each of these and identify areas for improvement. Do not share in chat box.
- Identify one key action to improve in one key area where you are weak.
 Do not share in the chat box.
- After the class, create an action plan and monitor progress every month.
 Promise?

Emotional Intelligence

- Emotional intelligence or EI is the ability to understand and manage your own emotions, and those of the people around you
- The theory behind this was proposed by Daniel Goleman
- EQ is considered to be greater than IQ. This is the reason many intelligent people do not make great leaders if they lack in EQ



Daniel Goleman



Emotional intelligence

Emotional Intelligence Domains and Competencies

SELF- AWARENESS	SELF- MANAGEMENT	SOCIAL AWARENESS	RELATIONSHIP MANAGEMENT
Emotional	Emotional self-control	Empathy	Influence
	Adaptability Achievement orientation		Coach and mentor
			Conflict management
self-awareness		Organizational awareness	
Emotions, strengths, weaknesses, drives, values and goals			Teamwork
	Positive outlook		Inspirational leadership

- An upset employee finds a compassionate ear. ...
- People listen to each other in meetings. ...
- People express themselves openly. ...
- Most change initiatives work. ...
- Flexibility. ...
- People have the freedom to be creative. ...

https://magazinestoday.co.nz/7-great-examples-emotional-intelligence-workplace/People meet out of work time.

Example of High EQ personJRD Tata



- Made friends easily
- Ran the Tata group consisting of several top notch CEOs like Russi Modi (Tata Steel), Moolgaokar (Tata Motors)...
- Gave them freedom, compromised his own opinions in order to respect them
- Bold & Adventurous Tata Airlines then became Air India



Importance of EQ

Video: https://www.youtube.com/watch?v=wJhfKYzKc0s



Leadership styles

- Democratic
- Authoritative
- Coercive
- Coaching



Leadership styles...

- Democratic: Trusts people to do the right things, Listens to concerns. Works best when employees are knowledgeable and only need coordination
- Authoritative: Articulates vision and approach, Sets standards & monitors performance. Best when team is new and not very skilled and PM is an expert
- Coercive: Gives lot of directives, Expects immediate compliance, Close monitoring & control. Best during a crisis, when minor deviations might result in serious problems, dealing with problem employees, applied to straight forward tasks
- Coaching: Helps employees identify unique strengths and weaknesses, encourages team members to establish long term development goals. Best when the engagement is a long one 2-4 years

Company fit

(hbr.org)

- Technical skills needed: Some products are very technical AI, Analytics
- Company philosophy about PM (relationship with engineering) –
 PM drives engineering, Engineering drives Product, Partnership
- Stage of company: Startup (broad exposure & expectations), mature (more focused role)
- Relationship with Leadership: Level of Autonomy to PMs

Profile: Jane Manning of Google AdWords





Questions:

- What challenges of a PM are highlighted in this article?
- What qualities of Jane do you appreciate and why?

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Appendix