

ProductMGT_Org_Pattern



Product management departments have many different structures. It is hard to state the best organizational structure for this function because of the variation in business models, skills sets and contexts in which products are sold. However what should be avoided is a structure where roles and responsibilities are too detailed and rigid.

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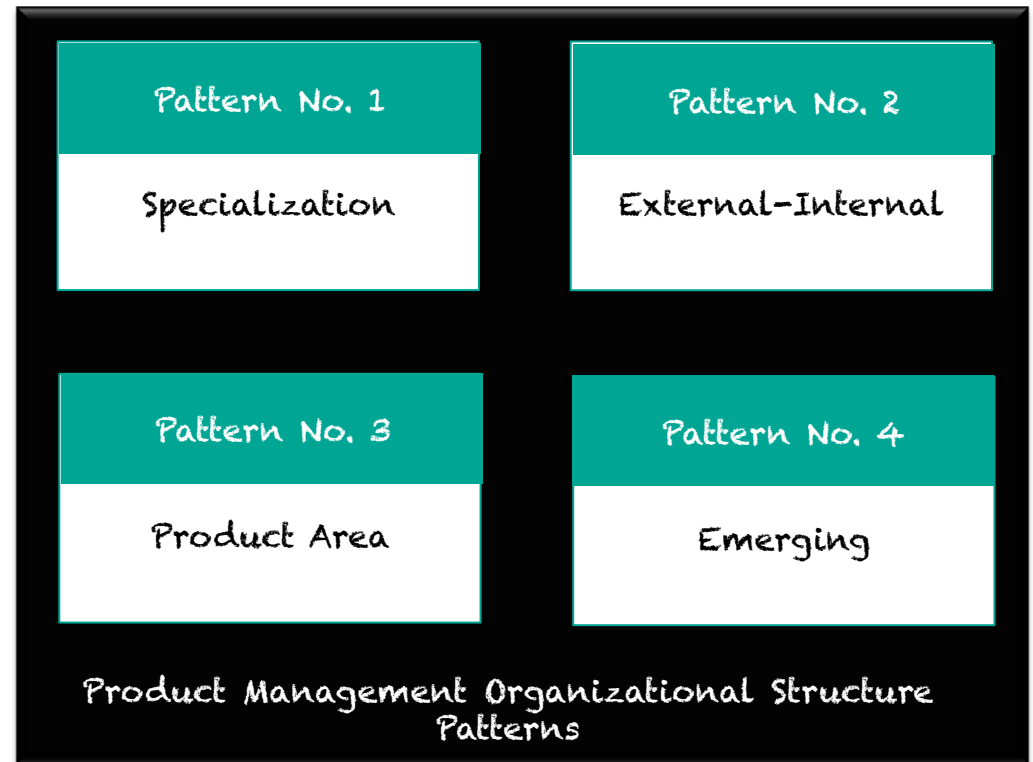


Creating an optimal structure for an organization is difficult, even impossible. Why? Perhaps because there is no best way. There are however, better ways for certain contexts and there are certainly bad ways. To better describe how to create an organizational structure, recognizable patterns can be of use.

First of all, what is a pattern? A pattern is a regularity, something that repeats in a predictable manner. We find patterns everywhere, in nature, art, architecture, science, mathematics, computer science, language, and of course within organizations. In the organization of Product Management I have observed four different reoccurring patterns, both in companies that I have had insight into and in the research I have done.

These are:

- **Specialization:** Structured as a collection of functional departments.
- **External-Internal:** Structured as an external department with customer contact and an internal department with R&D contact
- **Product Area:** Structured according to product line or areas of similar products, with both external and internal contact.
- **Emerging:** No formal structure, everyone helps out to perform the activities needed.



So which pattern is the best one? I don't know, It depends on the context, but there are some pros and cons to each.

This article focuses on Agile transformation and the recognition of Product Management Organizational Structures.

There are many debates on how to create a structure for Product Owners, however it's always important to first understand how the business model is set-up (or how it will be in the future), as this plays a large role in determining which structure will be most successful.



Agile development is being implemented everywhere with great success, but to get all you can from Agile and Lean you cannot stop at the team level. One very important area is the management of the product portfolio. While Agile and Lean offer many benefits, to best serve and prepare your projects the strategic work must be adapted to align with both the business plan and with the development process. Hence Product Management must also transform.

Agile is the dream of Product Management, though not everyone knows it yet. All the problems arising from unreliable data in financial models, unknown and dynamic markets, heavy customer research, big-bang product launches and more, finally have a development model that is designed to handle the unknown.

The Story of Captain Trouble

“For those who do not know him yet, the Captain used to be a member of the Product Management team. This was before the company grew to the size it is today.

The Product Management department used to be a lot smaller, in fact the Captain used to be alone. As the products became popular and more planning, support, features etc, were needed, the department doubled multiple times. There are now about 20 people working with Product Management. The Captain hired most of them.

“A generalizing specialist does one kind of job very well and some other jobs adequately. With generalizing specialists your team enjoys the benefits of high productivity, while lowering the risk of bottlenecks and retaining flexibility”



- Jurgen Appelo, Management 3.0

At one point it seemed that the recruitment would never end. The question was now, how to organize themselves? They had all jointly discussed the best solutions to the problems they faced and how to staff for them, however because they staffed around problems and activities, the department ended up with a very specialized structure. Few people knew how to do the job of the guy right next to them.”

With this structure the customer requires multiple channels into the organization in order to communicate their needs effectively. Often, from the customer's point of view, the organization is seen as one company, while the reality is that it consists of many separate functions that do not overlap. This is both frustrating for a customer who needs attention, and for the people within the organization. This structure is optimized around specific activities not for generating customer value.



The Agile Product Management Framework is a simple collection of processes which are more or less useful to a Product Manager or Agile Product Owner. It does not include all processes you may need, nor should you apply all processes it includes. It's a framework to which you add or remove processes when you judge that to be the best way forward.

The framework is built on a foundation of four cycles **Business Strategy, Product Releases, Continuous Sprints, and Daily Builds**. These four cycles manage important inputs, outputs and information. These are enablers for agile development. Agile development puts the customer in a central position and the Agile Product Owner as the guardian of "happily-ever-after".

I believe what a Product Owner does is the same thing that a Product Manager does, at least a successful one. This is not an easy job and they need all the help they can get. A Product Manager who has a passionate, customer focused, service minded, extroverted and dedicated development team that understands the market and takes responsibility for making sure their products thrive, does not lack much. But most of the time this is not the case.

To develop a really committed team you need to be committed to enabling them

"The way to break the cycle of dysfunction is to stop listening to each other and start listening to the market.

[...] There is a big difference between listening to the market and listening to the marketing department."

- Steve Johnson, The strategic role of product management



This article will not describe the whole framework and all its parts or how to apply the different processes, but for understanding patterns, roles and responsibilities it is useful.

Literature so far on Agile, including the definition of the Agile Product Owner, do not usually mention all these processes. It is assumed that someone else will do all that. But who? For example the Agile Product Owner should create a product backlog, groom it and be the one who has the last say in prioritizing one item over another. But how can he or she do that without insight and knowledge of Product Management processes. A product backlog without a vision or roadmap tends to be a shortsighted one and does not handle long-term innovation investment very well. Similarly a teams lacking an understanding of the business model and Profit & Loss have a hard time prioritizing.



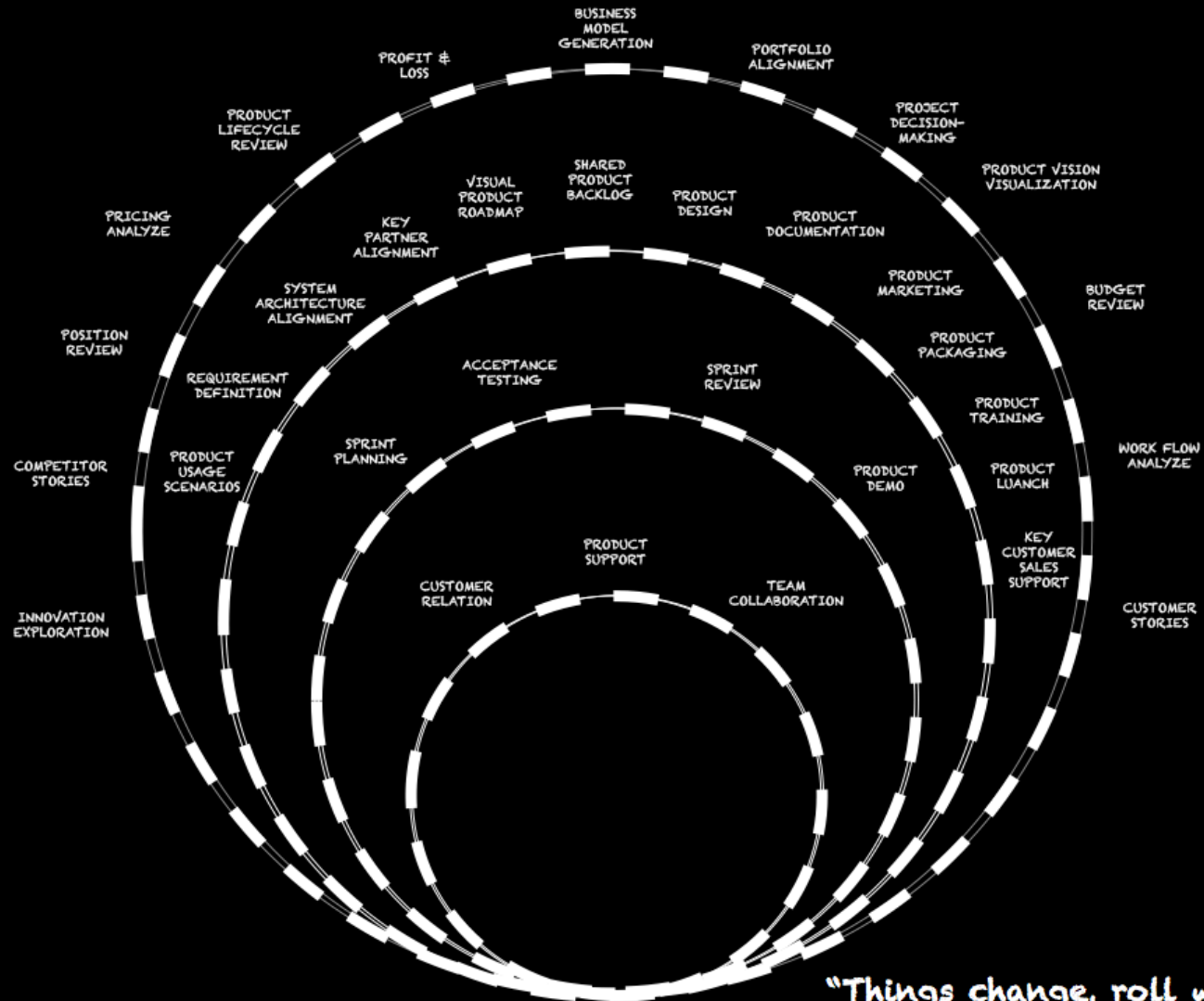
Agile Product Management Framework (A-PMF)

BUSINESS STRATEGY
3-6 MONTHS ITERATION
1-6 YEARS HORIZON

PRODUCT RELEASES
1-3 MONTHS ITERATION
3-6 MONTHS HORIZON

CONTINUOUS SPRINTS
1-4 WEEKS ITERATION
2-8 WEEKS HORIZON

DAILY BUILDS
DAILY ITERATION
WEEKLY HORIZON



"Things change, roll with it!"

No. 1 Specialization Pattern

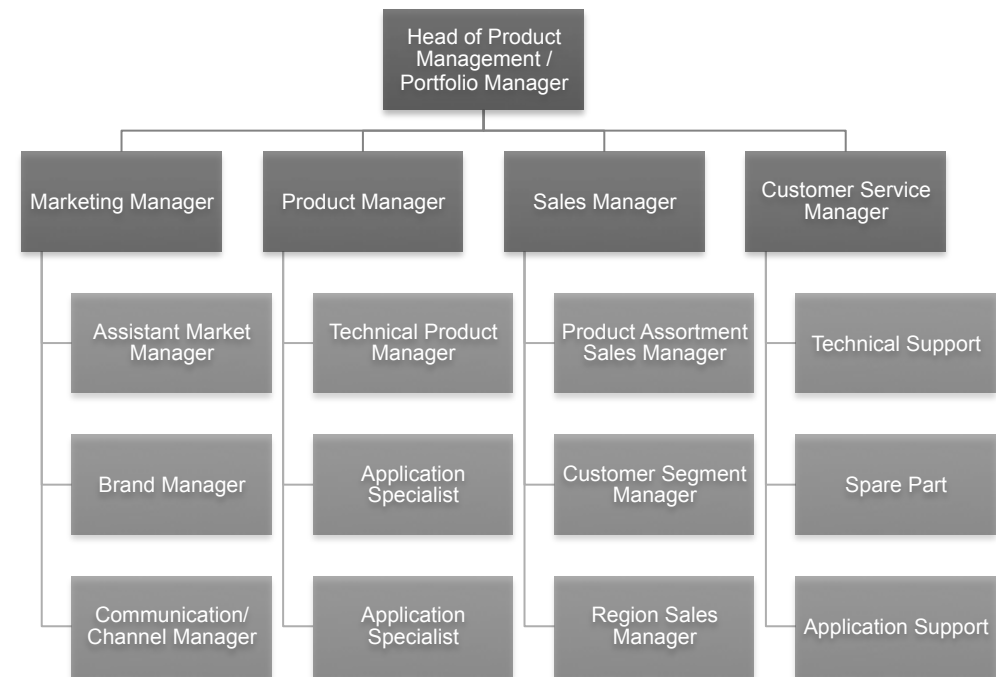
In this pattern the organization is divided into very specific roles and responsibilities. In each role a person is expected to take full responsibility for their area, and develop their skills and knowledge accordingly, becoming specialists in that area.

There are some “beware” warnings with this pattern. The system is not very resilient. When someone leaves after many years of service it leaves a big hole from the loss of explicit knowledge and an even bigger hole from the loss of tacit knowledge. Tacit knowledge can take a very long time to rebuild, if it can be restored at all.

The system is error prone. There will be times when something that is not thought of as someone's responsibility will be handled poorly. Consequently, there is a greater need for written processes and discussions about responsibility.

The system is also prone to sub optimization. Since few people have insight into each others work, people will do more of what they desire rather than what is needed.

The system is hard to diagnose. It is not unusual that it requires more people since a lot of work effort is lost due to sub optimization. How the responsibility can be divided between the different managers and their teams is illustrated in the organizational chart.



Here the Agile Product Owner will most likely be the Technical Product Manager or an Application Specialist and will be responsible for gathering input for the backlog from all other areas.

Another common trap is that other people in their specialized roles have individual requirements and consider their requirements the most important ones. This not only makes it hard to create a vision and a roadmap for the products, but also to have balanced portfolio.

If the Agile Product Owner is relatively new in the role, the Product Manager needs to help them to organize and prioritize. A tip for this structure is to give the Agile Product Owner the responsibilities of prioritization and developing the roadmap, but require them to consult the individual managers and get their approval. These managers in return have to help the Agile Product Owner feel comfortable and empowered.

A lot of time is required to facilitate the workshops needed to get everyone both involved in product development, and understanding the impact of a shared budget.



Roles and responsibilities

Marketing Manager

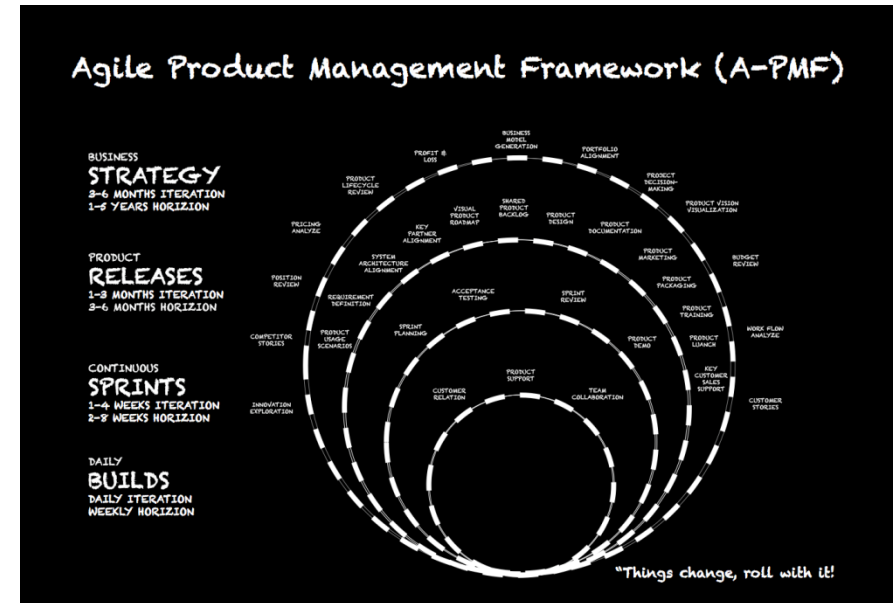
The Marketing Manager together with the marketing team will be responsible for external market contact. Their areas of responsibility might be: *Customer Stories, Competitor Stories, Marketing Material, Product Usage Scenarios, Customer Relations, and Packaging.* The Marketing Management team need to maintain close collaboration with the other teams to ensure market information is captured.

Product Manager

A large responsibility falls on the Product Manager who will have to make sure that everything in between external and internal runs smoothly. The areas of responsibility can include: *facilitating Product Vision, Merges and Acquisitions, Company Position workshops, Product Lifecycle Strategy, Distribution Channels, Portfolio Alignment, Product Design, Key Partners, Roadmap, Backlog, Requirement Definition, and System Architecture Alignment.*

General Manager

The General Manager will have the overall responsibility that all processes are maintained and improved. She also needs to make sure that the Product Management function within the company aligns with other departments. Some of the important areas the General Manager is responsible for include: *Budget, Business Model Generation, overall Profit & Loss, Work Flow, Pricing, and Decision-Making.*



Customer Service Manager

The Customer Service Managers main responsibilities can include: *Product Documentation, Product Training and Product Support.* The service team usually picks up valuable feedback from the market. It is crucial that the feedback reaches the whole department, including Research & Development.

Sales Manager

The Sales Managers main responsibilities are *Product Releases and Key Customer Sales Support.*

Note that this is not a formula for responsibility delegation but merely a recommendation, specific context must be considered. The framework is just to help sort the areas out.



Agile Product Owner Integration

No. 1

In the Specialization pattern the Chief Product Owner and Product Owners, form a Product Management team. The team has to maintain a shared Master Product Backlog, preferably consisting of items such as Epics and Features. Each Product Owner can then have a separate Team Product Backlog, consisting of Stories and Tasks which belong to the superior features.

This is needed for at least two reasons.

1. There is a need to coordinate the “portfolio” of things to be done. The Master Product Backlog should reflect the vision and roadmap of the whole Product Management organization, not just the wishes of individual stakeholders.
2. There is a need to use the Master Product Backlog as a collaboration tool between all people involved. Epics and Features need to be described in such language that everyone easily understands what they mean. The Team Product Backlog usually tends to be a bit technical and confusing for business people.

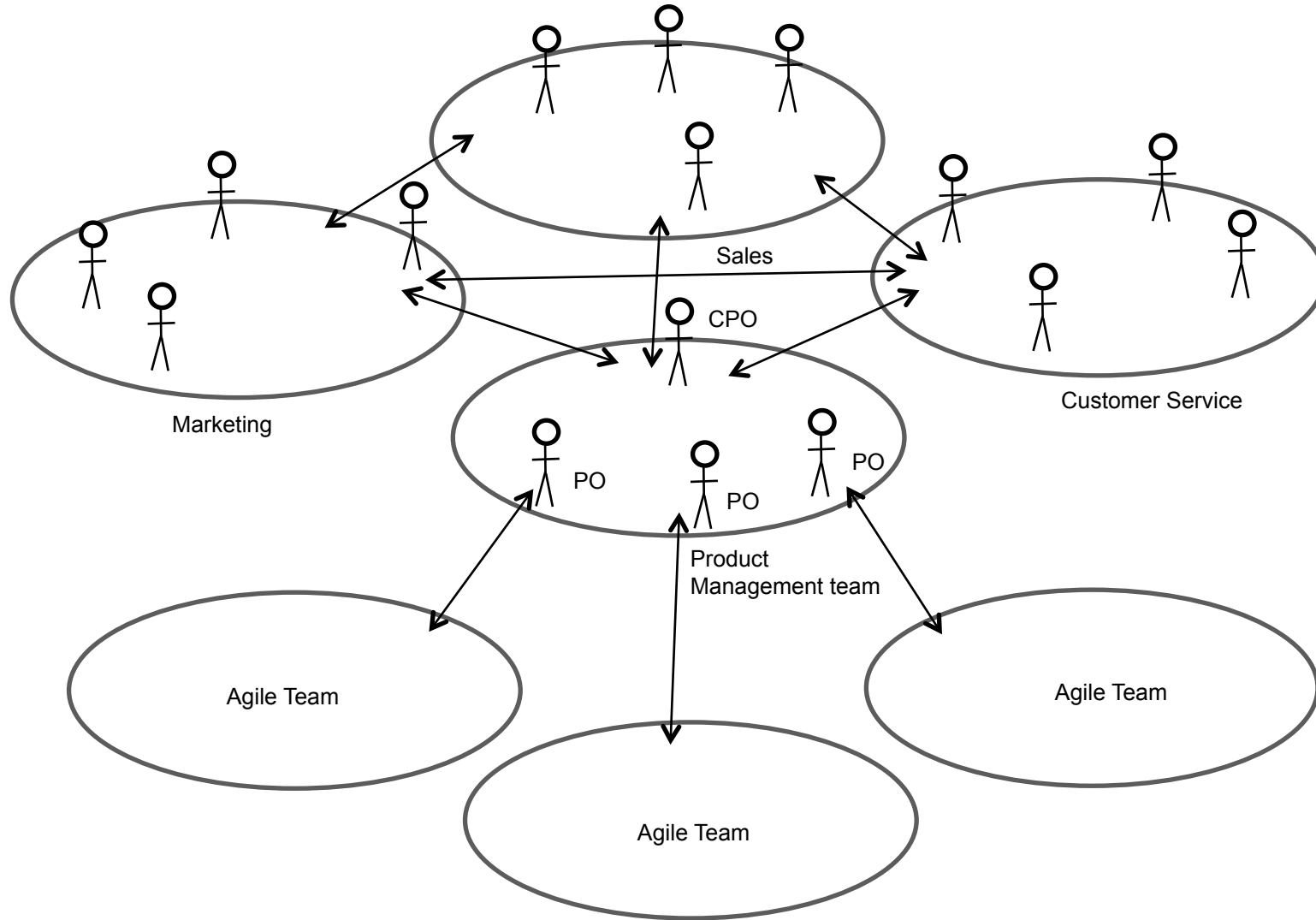
Depending on the context, specialist skills and the people, there are some alternatives for assigning Product Owners to teams.

1. The Product Owners are generalizing specialists and can therefore be assigned to one team and handle everything the team will work on.
2. The Product Owners are non-generalizing specialists and should therefore not be assigned to a team, but to Backlog items.

The first alternative is preferable to faster build a functional effective team.

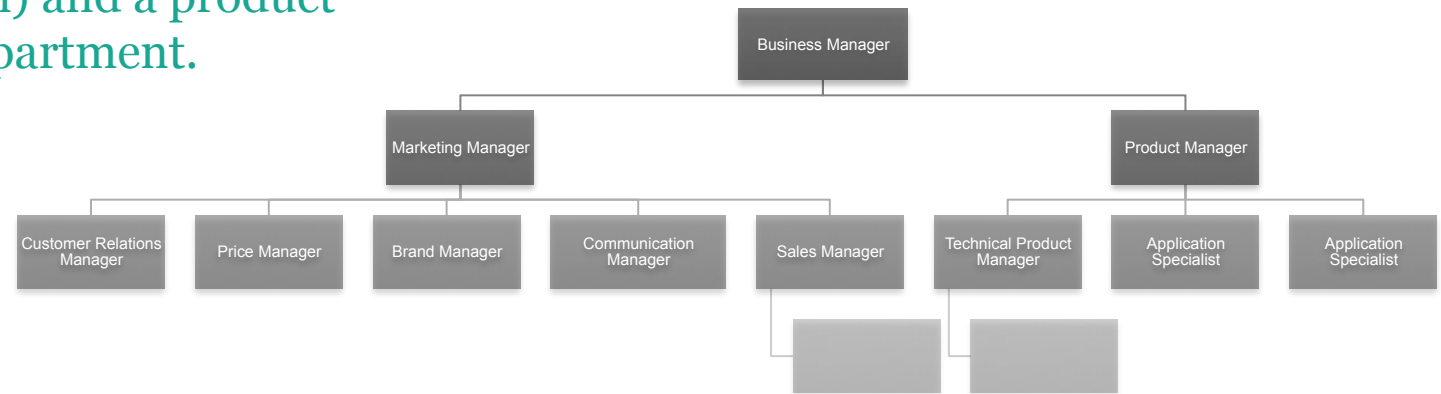


Agile Product Owner Integration No. 1



No. 2 External-Internal Pattern

The External-Internal pattern divides the Product Management organization into a customer focused (External) and a product development (Internal) department.



The customer focused department, more commonly known as Marketing Management, handles all communication to customers and external parties about the product. The Internal department, more commonly known as Product Management, handles the development of the product.

In this scenario the Marketing Management is usually the driver of strategic decisions, and Product Management the tactical executor. This approach can be referred to as the “Voice of the Customer”.

This pattern can cause a collaboration chasm between departments. Important tasks and activities can be missed and trust issues may arise.

Product Management tends to be more technically specialized and remote from business and the other way around for Marketing Management.

It is important for both teams to understand the business model to be able to work together despite their different specializations. The areas of responsibilities may be divided. The Agile Product Owner will, in this structure, be under Product Management. Here the role can be singular or multiple, divided by products, application specialization, or just by who fits each role the best.

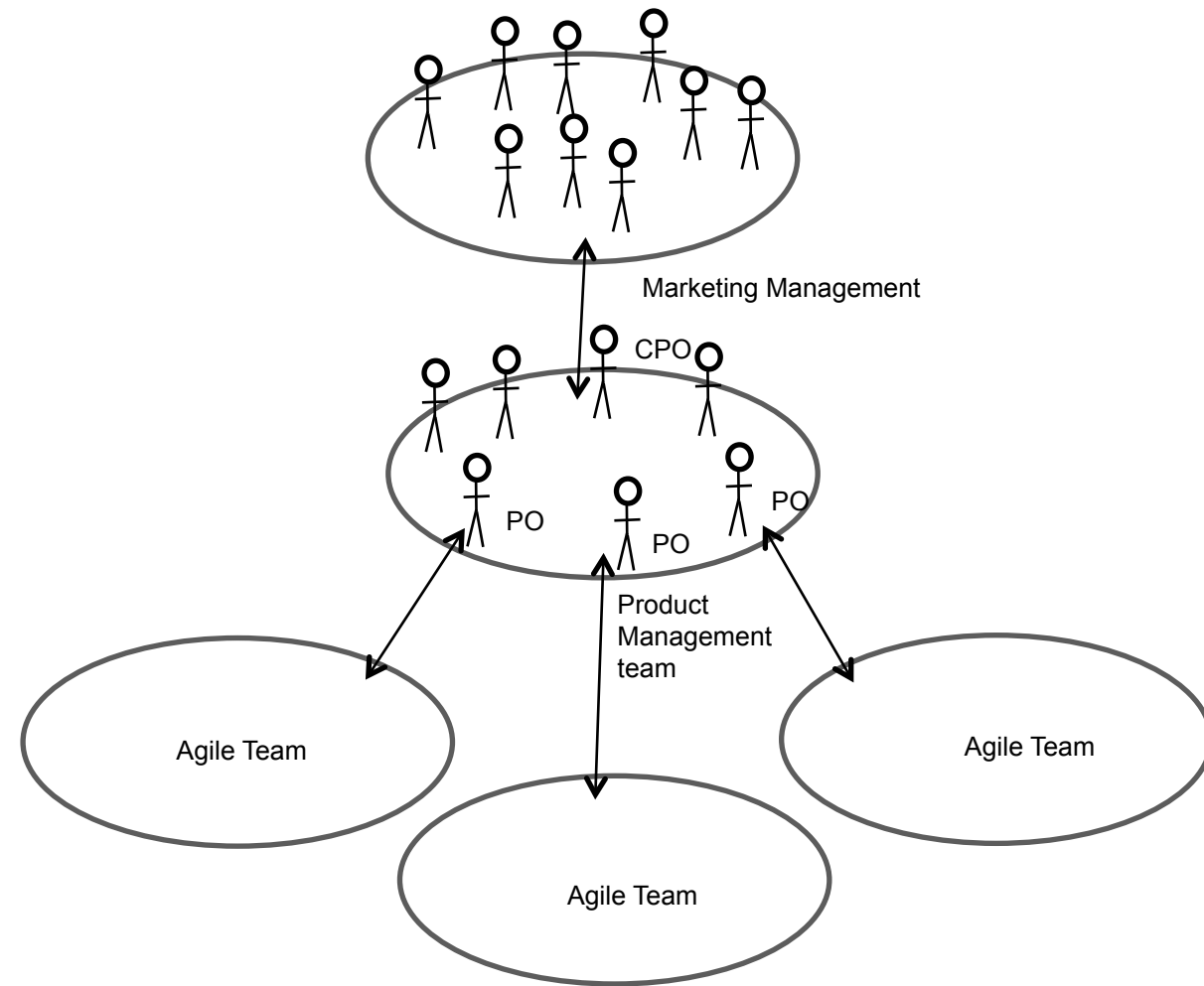


Agile Product Owner Integration

No. 2

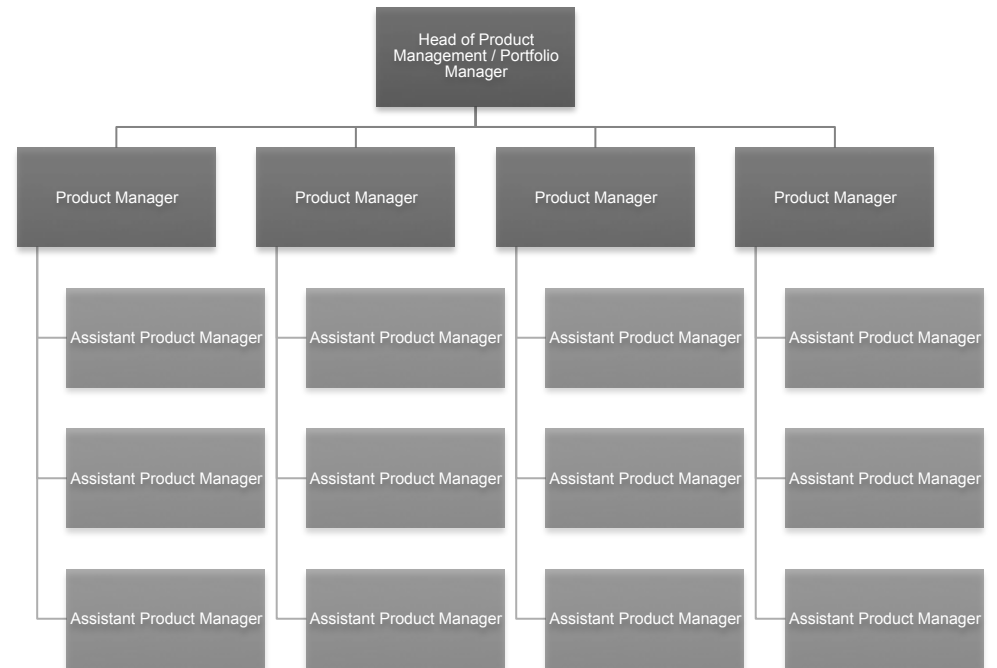
The difference in this pattern from the Specialization pattern is not significant. A Master Product Backlog backed by Team Product Backlogs is still preferable.

In this pattern there might be a risk of neglecting the technical platform if the organization is too Marketing Management driven. Another risk is that decision-making can end up solely with the Marketing Manager and the Chief Product Owner. When there are fewer interfaces and interdependencies, there is a risk that important market information and knowledge is not picked up. This is unwanted and the Chief Product Owner needs to ensure that there are representatives from all areas.



No. 3 Product Area Pattern

In the Product Area Pattern the Product Portfolio has been divided into product areas where the products share some similarity.



In the Product Area Pattern there is a General Manager (also called Portfolio Manager) for the whole Product Management function. This person is responsible for the those working under him and for balancing the portfolio of products.

The portfolio of products has been divided into subcategories where similar products are grouped together. Each subcategory has a Product Manager who is responsible for the Product Management function of that subcategory, and for the balance of that sub portfolio. She is also responsible for the people working under her. Under each Product Manager is several Assistant Product Managers who are in turn responsible for one or more products.

The Assistant Product Manager is a junior role which should develop the skills needed for Product Management.

The set of Assistant Product Managers, together with the Product Manager, work together to manage their set of products. They work as a team to get things done and many responsibilities are shared. Roles are usually divided, based more on personal skills, desires and personality than on any formal structure, to cover all Product Management activities. The Agile Product Owners in this pattern are preferably the Assistant Product Managers.

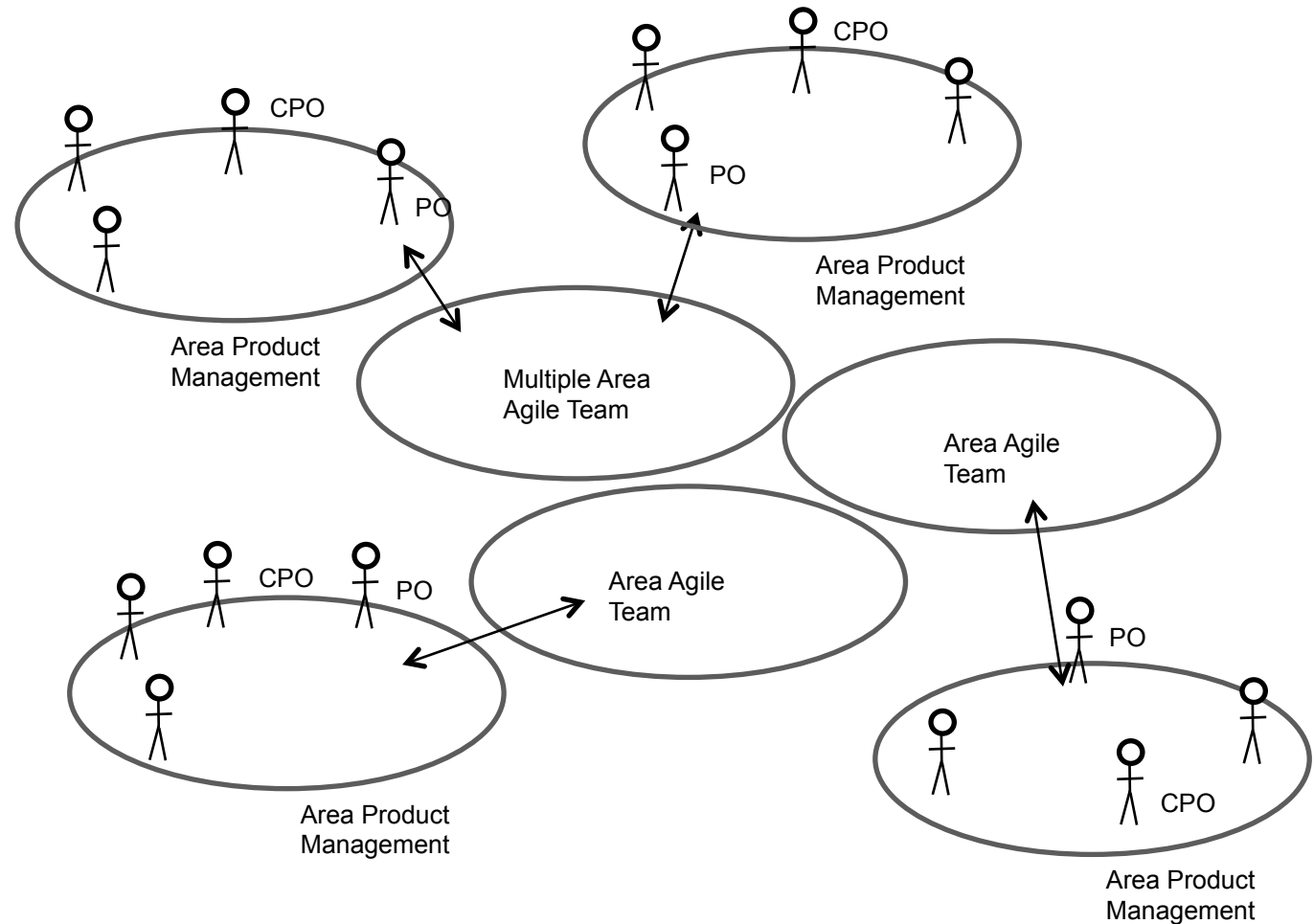


Agile Product Owner Integration

No. 3

In this pattern Product Management for each area will have a Chief Product Owner. One or more Product Owners are assigned to one or multiple teams. This pattern can be efficient but can also become very complex. Teams can become specialized in one market Area and less flexible/general. There is also a risk of dependencies between Team Backlogs. There are some criteria to be considered when using this pattern.

1. The need for multi-project planning and portfolio management is most important since each Area Product Management team will probably have a separate budget. The Head of Product Management needs to be deeply involved in planning to ensure the optimal use of the overall budget. Avoid fixed Strategic Buckets where a defined amount is dedicated to a portfolio of products yearly. A better budget approach would be dynamic Target Levels for each portfolio but where the budget can be revised based on opportunities.
2. The need for a modularized system architectural platform is critical to keep the interdependencies low. Each team needs to be able to change with minimum effect on other teams (Conway's Law).



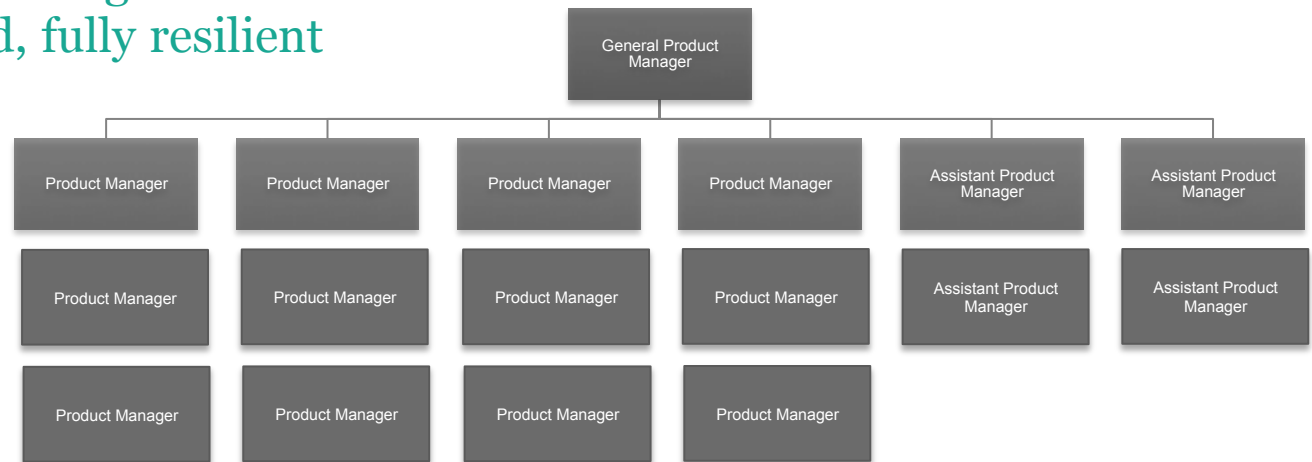
3. The teams have to work at remaining general in order to stay resilient.
4. Customer Support issues will have to be shared. Here there is a risk that Areas will try to optimize around themselves.

Once these criteria are fulfilled the this pattern can become fast, adaptable, resilient and competitive.



No. 4 Emerging Pattern

The Emerging pattern is a fully flat and T-shaped organization where everyone shares the responsibility of product management. It is driven by urgency and need, fully resilient and responsive.



In the Emerging Pattern there is a General Manager (also known as Portfolio Manager) for the whole Product Management function. This person is responsible for the people working under him and for the balance of the product portfolio. The rest of the organization is “flat”, only one manager for the whole department.

There is however a knowledge hierarchy based on skills and experience. The Product Manager is more knowledgeable than the Assistant Product Manager. The Product Managers and Assistant Product Managers work together as one or in multiple teams to manage all of the products in the portfolio.

What individuals do is decided based on personality, skills, development plans, desires and what needs to be done. The ultimate goal is to have everyone at the same level of skill and knowledge, whereby tasks and activities can be selected based predominantly on personality and desire.

The system becomes resilient, prestige-less and optimized for collaboration and for “what matters”. The only downside is that it takes a lot of investment, training and time to build a Emerging organization.

The Agile Product Owner could be anyone, joining development teams as and when needed. There is no predefined integration of the Agile Product Owner and any organizational design upfront is unknown. It emerges.



Conclusion

Regardless of which pattern you choose it can be adapted with Agile and has both positive and negative aspects.

Specialization Pattern

This pattern can hide sub-optimizations, each specialized unit can become a stakeholder and have their own agendas, making it hard for the Agile Product Owner to create a “lean” Product Backlog. This pattern also hides dysfunctional behaviors from the over all Product Management. I would not recommend this pattern as a final one for an Agile transformation.

External-Internal Pattern

With this structure the system can end up with too much of a marketing department driven approach and be too focused on the short term. The Chief Product Owner needs to be assertive and focus on the whole, considering both the short-term and long-term. This is also not a recommended pattern for Agile transformation.

Product Area

This pattern has the classic risk of losing the alignment between product lines and over all company strategy. It also runs the risk of bypassing commonalities between product lines and missing out on economies of scale when each product line is not aware of what the other product areas are up to.

Once these problems are resolved it is quite compatible with Agile transformation, where teams can form around each product area. Co-ordination, collaboration and cross-team-planning are the main focus and risk areas.



Emerging Pattern

The Emerging pattern has the problem of figuring out what to do and this can seem a bit unstructured and scary. It is. To create this structure requires individuals that are highly skilled and highly general in all aspects of Product Management. It does not work well with job-hoppers, who move quickly from role to role. It needs dedicated people who are committed to the long term, to learning new skills and to constant development. The key is to let the structure grow and continuously transform into what it needs to be. Hence the name Emerging. The Emerging pattern is the optimal fit with Agile development. Since the Agile organization is also emerging and continuously transforming, it makes perfect sense that its Product Management structure transforms with it.



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Inspirational sources

Complexity and organizational reality – Ralph Stacey

Management 3.0 – Jurgen Appelo

Agile Excellence for Product Managers – Greg Cohen

Agile Product Management with Scrum – Roman Pinchler

The Product Manager's desk reference – Steven Haines

The Strategic Role of Product Management – Steve Johnson

Thanks to David Jackson for editing and theoretical dialogues.