

ORGANISING FUTURE PRODUCT DEVELOPMENT

Trends, challenges and recommendations

A viewpoint on how to organise your
global R&D and product management
to become fit for the future

Trends and challenges in global R&D and product management

This viewpoint is based on Implement's huge knowledge and industry insights within product development. Moreover, we have conducted empirical research (simple scout research during projects) about the trends and

challenges in global R&D and product management as well as conducted a small sample survey among global companies with a strong focus on physical product development and related services.



Purpose

In the autumn of 2019, we set out to explore trends in companies with global R&D, focusing on how to best organise the development of products and services as a company. This was done as a simple scout research, including a small sample survey.

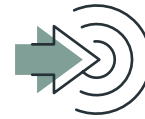


Approach

A pragmatic approach driven by insights from the survey and empirical experiences of the authors of this report.

A data-driven approach where we asked companies how they perceived the pace of change impacting the way of organising in global R&D and product management.

An empirical approach where we considered our experiences as advisers in concrete engagements as ingredients for the discussion on how best to organise.



Outcome

The outcome of the survey insights and the experience embedded in this report is a coherent perspective on the trends that we have observed at the end of 2019.

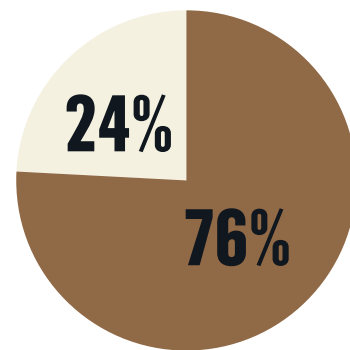
The purpose is to serve as input to a continued discussion on how to best organise the development engine of the future.

Many companies have recently reorganised their R&D

Reorganisations are heavily triggered by external changes, and these days, things move quickly. To keep up, product development and service organisations need to adapt more rapidly to changes. This calls for a need to reorganise for the future – now.

Has your company recently experienced external changes that have resulted in a reorganisation of R&D?

- No
- Yes



Changes take place more rapidly

Approximately ¾ of the surveyed companies have experienced external changes leading to a reorganisation of their global R&D organisation, and external changes are expected to be even more relevant in 2020 and onwards.

This picture is aligned with our general observations, where most of our clients, who are either product development or service organisations, express an increasing need to be able to change rapidly to adapt to changes in their environment.

Reorganising for the future

Reorganisations are often a result of:

- New technology-driven product development (inside-out).
- User insight-driven processes (outside-in)
- Inefficient cross-functional collaboration (process end-to-end)

Reorganisation initiatives all have the same purpose in mind: to ensure that companies gain or sustain a competitive advantage through new innovative products and services.

For many companies, however, finding the right approach to organising for the future is challenging – especially when trying to organise across marketing, product management, R&D and supply functions.

Some companies are also starting to see the effect of “negative globalisation” and are moving R&D activities back from abroad, e.g. from China to Denmark.

In this viewpoint, we will provide insights into trends and challenges in global R&D and product management. Also, we will highlight five key dilemmas that need to be addressed when reorganising your product development.

We have identified five key dilemmas that must be addressed when reorganising your product development

To achieve a successful reorganisation of your product development efforts and become fit for the future, you must balance five key dilemmas. It is

important to consider all the dilemmas and adjust solutions to match the context of your organisation.



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2

3

Organisational structure versus power of interaction

On the one hand, how can you create the right balance between formal structures, processes and standards and on the other hand provide people with the freedom, autonomy and interaction tools that allow them to perform their best and make the right decisions wherever and whenever?

Vertical control versus horizontal empowerment

How do you create the right balance between functional and cross-functional organisation, ensuring empowered cross-functional collaboration between R&D and the rest of the organisation while still maintaining a meaningful delineation between functions and activities going across?

R&D organisation – emergent or deliberately designed

Have you clearly identified R&D's purpose based on your core business rather than what has come through, i.e. outsourcing and acquisitions?

For instance, how do you balance the trade-off between proximity to existing production sites and access to the right skills and competencies?



Trends

Previously outsourced R&D is more frequently sourced back (recentralisation of R&D).

Product development projects increasingly make use of virtual tools to ensure effective and sustained progress in a global world.

End-to-end accountability and commercial success are increasingly important.

Content of this viewpoint

The following pages provide key insights from our clients and our own collective project experience, our view on the key challenges and some key questions that can inspire you to reconsider how to best organise for future development in your own company.

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Achieving full commercial accountability

How can you achieve commercial accountability by rethinking your product management organisation to anchor a strong customer and market focus?

What will it bring you to give accountability for commercial success to product management?

Organising for commercial success

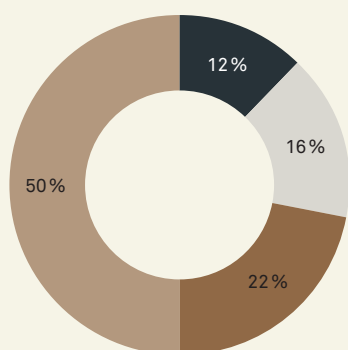
How can you ensure that product management has the prerequisites and right tools to fulfil the commercial accountability?

How do you balance product management activities, e.g. between the need for servicing existing products versus developing new ones?

Organisation of R&D activities

The majority of respondents have largely centralised R&D organisations.

How is R&D organised in your company today?



- Central R&D hub with subsidiaries
- Centralised R&D
- Decentralised R&D network
- Other



Insights

Of the responding companies, the majority either have a completely centralised R&D organisation or a structure combining centralised R&D functions with one or several subsidiaries.

Roughly $\frac{1}{4}$ of the companies operate with decentralised R&D networks or other setups.



Key questions

How could you best organise R&D if you take a step back and disregard historical development?

Why would you not have a dispersed R&D organisation if you could find the best people in different locations and had the right tools to support their collaboration?



Our view: R&D should focus on co-location

Even globalised and distributed organisations obviously need to have a strict control of their development processes and functions. Therefore, they quite interestingly tend to strive towards centralisation of the R&D efforts.

Agile product development projects with several clients have shown that working efficiently together across locations is not a matter of location but a question of having the right mindset and collaboration tools in place.

Remote project work keeps accelerating. We know from experience that it is an advantage to be able to connect physically and that co-location heightens both speed and quality. Distance work only works if the right co-location/collaboration tools are in place to support your projects.

From our perspective, the physical centralisation of the R&D organisation (i.e. in headquarters or a hub) is not necessarily what creates the highest value. Essentially, it is the ability to co-locate the right people and the close coordination and collaboration in project teams that matter. And this can be done both physically and virtually.

Functional anchoring of R&D

R&D is typically organised as a separate unit in the wider organisation.



Insights

As expected, we saw a trend in having R&D anchored as a separate functional unit in the organisation or being part of a larger development organisation and in one instance part of Marketing.

One case also reported separated R&D with research as a central division, while development is placed in the business.



Key questions

How can you ensure integration and cross-functional collaboration between R&D and the rest of the organisation while still maintaining a meaningful delineation between functions and activities?

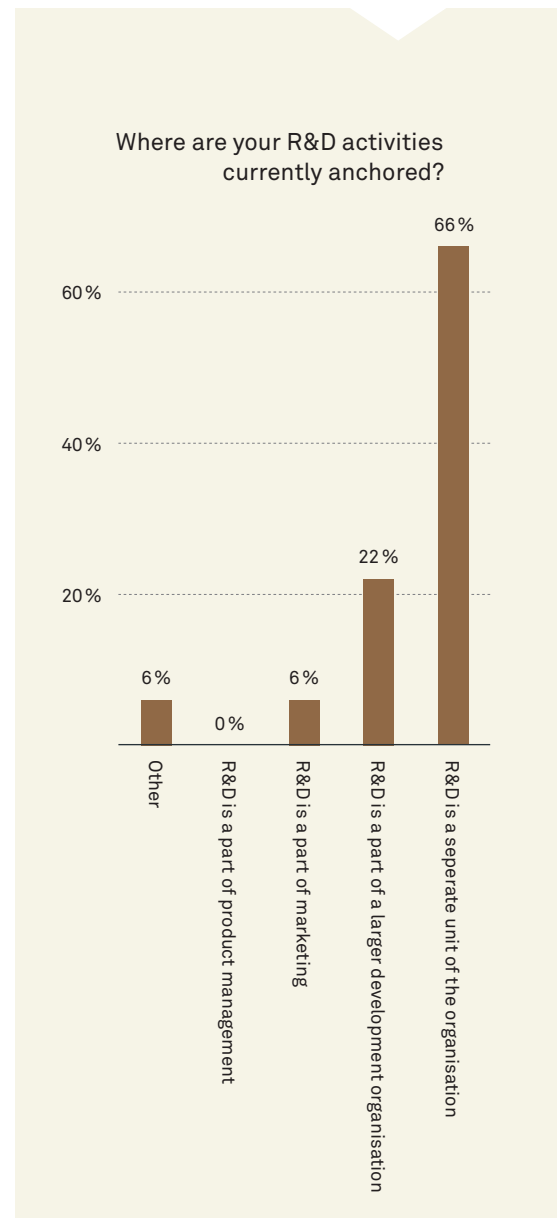


Our view: Be aware of not separating thinking from doing

We agree that specialisation of R&D in separate functional units is an important element of developing new products, services and capabilities.

However, we must also acknowledge that innovation can come from anywhere within and outside the organisation – and working across functions and delegating empowerment to small teams in which they make their own decisions create higher productivity and motivation and release creative energy.

Even though many organisations still have some version of a hierarchical structure (i.e. based on functions or geographic areas), we believe that there is a need for reducing hierarchy and silo thinking. We currently observe a trend towards a more value stream-based organisation of R&D activities, where each unit is end-to-end accountable for e.g. a product, a feature or a customer segment.



Optimisation of the R&D organisation

Governance, technology platforms and procedures are keeping the R&D organisation running.



Insights

Governance models, technology platforms and standard procedures are the elements most commonly used to optimise R&D organisations.

In addition to these classic elements, the introduction of digital collaboration tools and coordination efforts plays an important role.

Results indicate that using digital collaboration tools still has less focus as an optimising element than the more “traditional” elements.



Key questions

How can you create the right balance between formal structures, processes and standards and provide people with the freedom, autonomy and interaction tools that allow them to perform their best and make the right decisions wherever and whenever?



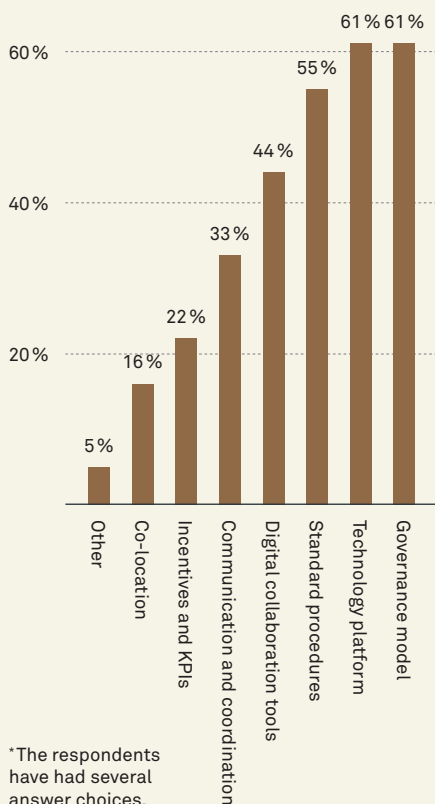
Our view: Fewer rules, more interaction

We believe that digital collaboration tools and efficient communication/coordination cannot be separated from e.g. governance models and should therefore be prioritised even higher in optimisation efforts than they currently are.

Enabling employees to stay in touch, communicate and collaborate more frequently and efficiently makes it easier to ensure constant alignment, flow and impact in product development projects.

Basically, we believe in fewer rules and more interaction as a means to optimise the R&D organisation, giving people the right tools to collaborate rather than building models and standards they must follow.

Which element have you focused on to optimise your R&D organisation?*



Motivation for how to organise R&D

Proximity to existing production sites is the main motivation for how to organise R&D.



Insights

Proximity to existing production sites is one of the key drivers of choosing an R&D site (33%). This is not surprising as co-location makes sense from a collaboration and effectiveness point of view.



Key questions

How do you balance the trade-off between proximity to existing production sites and access to the right skills and competencies?



Our view: Mind the trade-off between proximity and access to skills

It makes sense to co-locate R&D and production sites, also from an innovation point of view, as design, testing, development and production can be done in faster iterations compared to traditional stage-gate development.

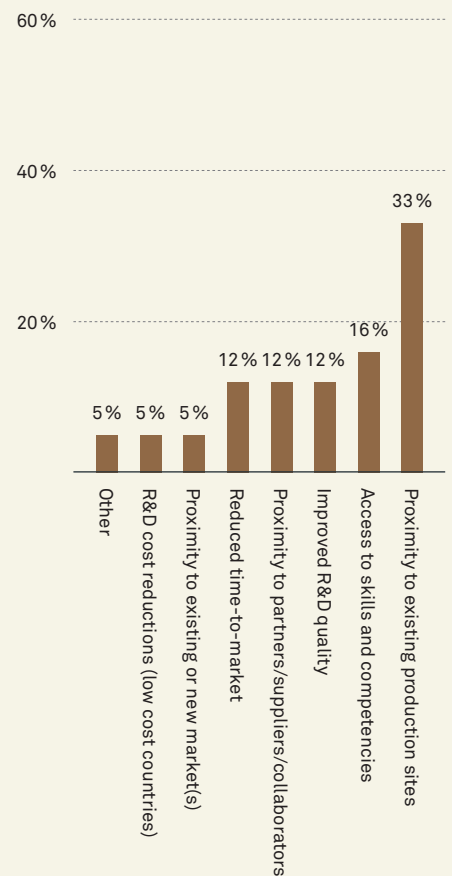
We also see that many organisations are looking for R&D locations with access to specific skills and competencies.

Companies should be aware that there is a trade-off between proximity to production sites and skilled people. These might be in different places.

In situations where production vicinity is not possible, standardised structures and processes become essential. Focus should especially be on implementing effective digital collaboration and communication tools.

Quality, time to market and proximity to partners and suppliers are also important motivation factors. We know that time to market gets more and more critical and that launches become more and more frequent, calling for an adjusted and more agile operating model in R&D.

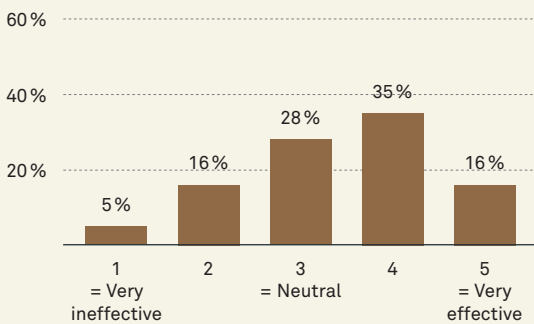
What was the most important motivation when choosing how to organise your R&D operations?



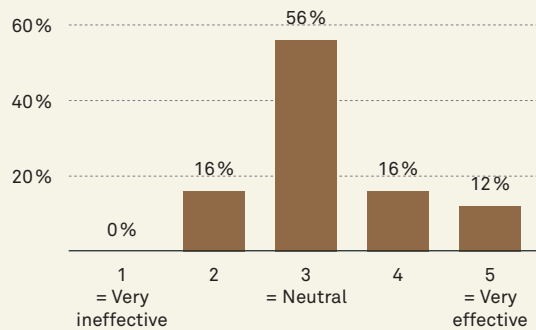
Effectiveness of R&D

Effectiveness seems to be high in the development process but less so in commercial success.

In your opinion, how effective is your R&D in terms of **development processes**?



In your opinion, how effective is your R&D in contributing to **commercial success**?



Insights

While most respondents reported that they have a somewhat or very effective development process, they are less convinced of the contribution of R&D to the commercial success of the company.



Key questions

What is the best way to ensure that a commercial mindset is established in your product development projects from day one?



Our view: Do not develop products, develop business

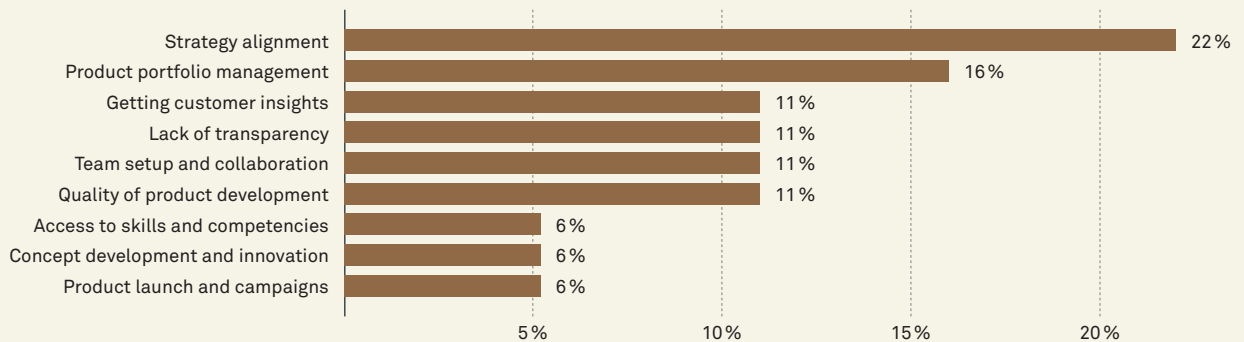
The insights correspond with our observations and experience. Global product development companies are generally very good at developing products (focusing on deliverables). However, they sometimes lack focus on what impact they can create based on a thorough understanding of customer pains and needs. They often do not test their assumptions about a product, service or value proposition early enough (focus on commercial success) in the front end of development or in the entire go-to-market approach.

A misunderstood approach that we have observed in several cases is to just develop products faster. Companies should rather develop prototypes to test with the market faster to get sufficient insights into the entire business model. By doing so, you can develop end products or services that meet the expectations of the market and thereby develop business with higher impact and a higher rate of commercial success. Several new and more agile, explorative and iterative approaches to R&D support this way of thinking.

Challenges in R&D

The biggest challenges for R&D are strategic alignment and the ability to manage the portfolio.

Given your current R&D setup, what is the biggest challenge you currently face?



Insights

Most respondents point at strategy alignment and product portfolio management as the biggest challenges in R&D (~40%).



Key questions

How can you ensure that your corporate strategy is firmly aligned with your product portfolio and the initiatives in R&D?

Which initiatives and activities can support this alignment effort?



Our view: Align strategy and R&D with market needs

Corporate strategies are becoming more dynamic and are changing more frequently. They are usually based on a holistic perspective, whereas the product portfolio and R&D setup are (ideally) somehow a breakdown of that strategy. We frequently see that corporate strategy, product portfolio and R&D activities are not aligned, and e.g. market trends are perceived differently in the organisation.

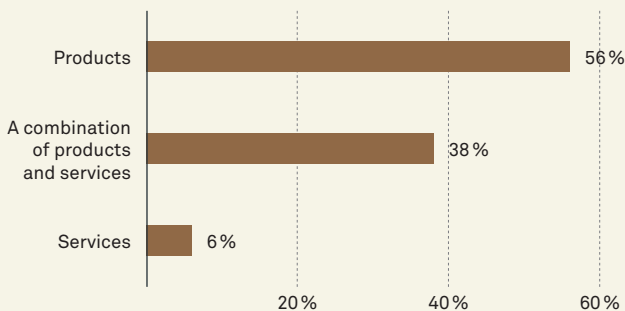
In our view, it is (obviously) important to have a well-proven and efficient translation of the corporate strategy into product portfolios and the

organisation's development muscle. Having this in place supports alignment of the strategy to executable initiatives, reflected in the R&D setup.

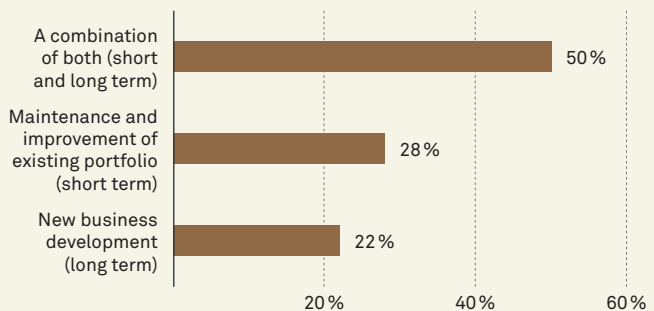
Focus of Product Management activities

Product Management activities are mainly focused on products and combine short-term and long-term focus.

What does your current Product Management activity primarily focus on (**scope**)?



What does your current Product Management activity primarily focus on (**horizon**)?



Insights

Product Management activities are mainly centred around core products (56%) or products combined with related services (38%).

Most respondents focus on bringing new products and services to the market and maintaining the existing product portfolio, balancing the product portfolio mix (50%).



Key questions

Do you find the right mix and get products, software and services

integrated into solutions aligned well in advance of launch dates?

Do you have the right balance between short-term and long-term investment decisions?



Our view: Balancing the portfolio mix and ensuring coherency in end solutions

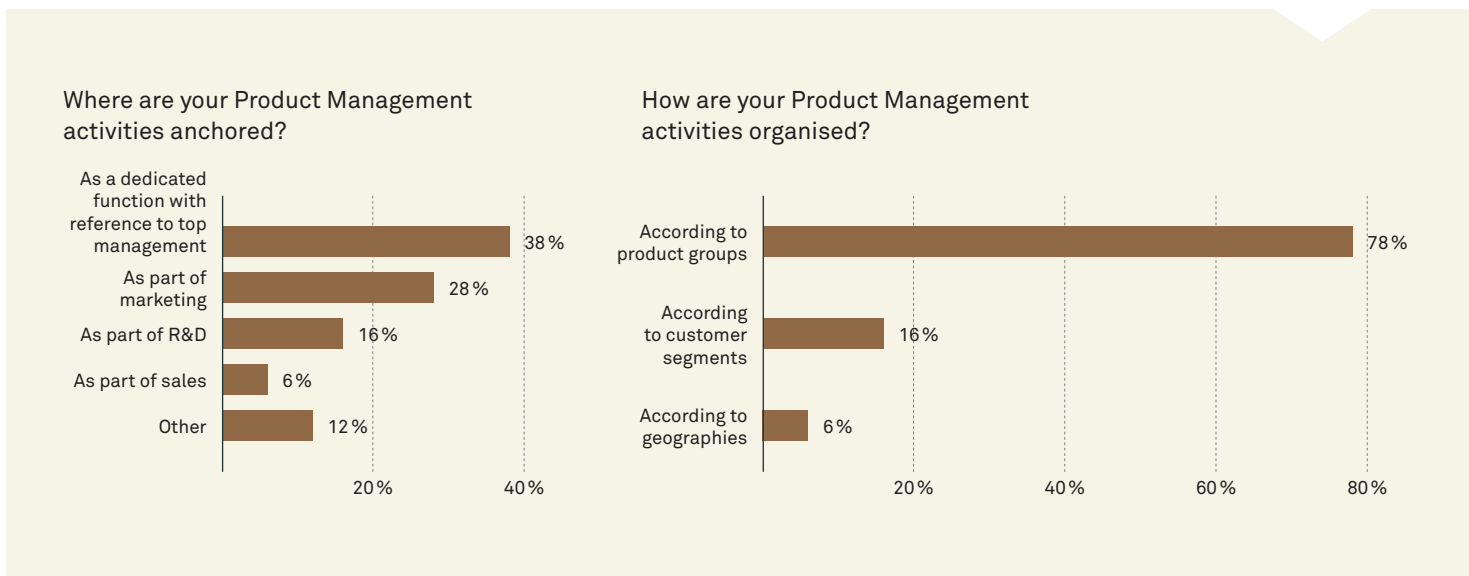
We observe that many companies are on a continuous journey from being purely product-focused players towards becoming integrated solution providers where the solution consists of physical products (HW), software (SW) and services.

In these cases where the end solution consists of HW, SW and services from different areas of the organisation, there is an even stronger need for having excellent integration capabilities to ensure coherent solutions. We also witness a need for introducing end-to-end accountability in the entire development process to safeguard the success of future market launches.

For Product Management, it is also particularly important to have the right capabilities to lead and drive development projects, including being able to prioritise across the portfolio (pivot/persevere) and for product managers to have the right authority to make decisions.

Product Management organisation and anchoring

Product Management is organised as a dedicated function or as part of Marketing with focus on product groups.



Insights

A majority of respondents (65%) report that Product Management is either a dedicated function or part of Marketing, indicating that it has attention from top management and from a commercial point of view.

The closer the Product Management function is to the market, the more you would expect it to be aligned with end user needs and expectations. However, results indicate that the majority of respondents organise around product groups (78%), which is an inside-out perspective on developing a business.



Key questions

What will it bring to rethink your Product Management organisation in terms of a stronger customer and market focus?



Our view: Risk of Product Management being “caught in the middle”

We have witnessed examples of Product Management functions being relocated repeatedly between Marketing, R&D or even established as a separate function – and there is not one correct answer to the ideal

way of organising. For example, some companies that reorganised themselves around customer segments did not succeed (i.e. there is a task in figuring out which segment should produce what product if more segments demand the same product).

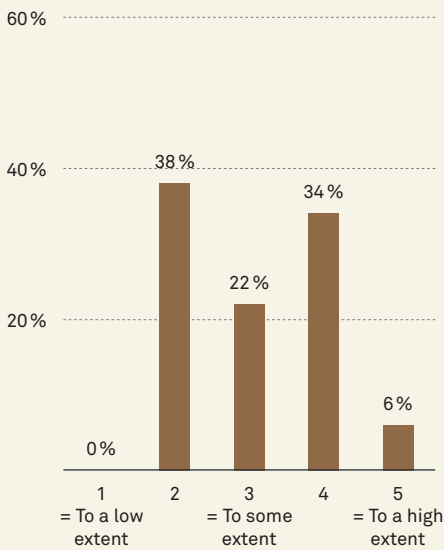
Acknowledging that Product Management is a core function, it should get more attention and direct access to customers. We often observe that this function is equipped with technical expertise and less commercial expertise (and sometimes even less skilled people).

We believe that the Product Management function requires people who are experienced, skilled and have the ability to take ownership of a potential new business/revenue stream.

Integration and collaboration between R&D and Product Management

Integration and collaboration seem to be somewhat weak.

How do you perceive the integration and collaboration between R&D and Product Management?



Insights

Almost 40% of respondents believe that integration and collaboration between R&D and Product Management is rather weak, and only 5% believe that it is very strong.



Our view: Break down the hierarchical boundaries

We believe that having teams working cross-functionally is the foundation of focusing on creating maximum value in the product development processes – despite possible functional silos.



Key questions

Do you have a clear vision for teams working across R&D and Product Management, including how they can collaborate effectively?

How might you minimise functional organisational boundaries and mobilise functional leadership, empowering project teams to move faster?

In our view, roles and responsibilities in development projects must be very clearly defined. This especially goes for agile projects where things move according to well-defined routines.

Two senior roles are crucial to the success of development projects: The product owner and the project leader (or Scrum Master in agile terms) and their mutual interaction. The dependency towards the success of the project should not be underestimated.



Main drivers of Product Management

Product Management plays an important role in building and launching new business.



Insights

Launching new products and services and being close to customers are some of the main drivers of the current Product Management setup. Other important drivers include having a good overview of the product portfolio (33%).



Key questions

How can you optimise your current setup to better support efficient and frequent launches and releases?

How can you make certain that focus is on prioritising your product portfolio (and kill projects, if needed) based on the impact created?



Our view: Think cross-functionally, slice and early launch

We agree that combining efficient launches with a good overview and customer closeness is an important factor in creating new business.

We also believe that efficient launches of new products and services require a cross-functional mindset to make it effective and smooth.

Placing Product Management in the Marketing organisation makes sense in order to achieve closeness to customers and their needs – keeping in mind not to detach Product Management from R&D.

We recommend focusing on slicing the product and making frequent launches to meet the most important client requirements. This can shorten lead time and increase benefits realisation.

The product manager function is defined very differently at different companies – from accountable for product launches to a more comprehensive function, including gathering and managing insights, sales and support. In our view, product managers should have both strong market insight and in-depth product knowledge.

33%

said that **efficient launches of new products and services** were the main drivers of their current setup of Product Management.

22%

said that **proximity to customers and end user needs** were the main drivers of their current setup of Product Management.

33%

said that a **good overview and coordination of the product portfolio** was the second driver of their current setup of Product Management.

Challenges in Product Management

Decision power and coordination between Sales, Marketing and Product Management are typical concerns

27%

said that **lack of decision power and decision quality of new products** was the biggest challenge in their current setup of Product Management.

22%

said that **poor coordination and integration between Sales, Marketing and Product Management** were the biggest challenges in their current setup of Product Management.

22%

said that **slow time-to-market** was another challenge in their current setup of Product Management.



Insights

Lack of decision power and decision quality of new products is perceived as the biggest challenge (27%).

Coordination and integration between Sales, Marketing and Product Management and time-to-market seem to be difficult (22%).



Key questions

How might you reduce time-to-market by supporting people with the right amount of decision-making power based on insights and the right knowledge?

How can you best mobilise a project team across the organisation, promoting coordination and integration that ensure engagement, understanding and anchoring of project results?



Our view: Pass on decision-making, trust and engage

It is not uncommon that decision-making is given to NPD teams and then overruled by management later on – even very close to launch dates.

We believe that empowering teams combined with involvement of key stakeholders and management (sponsors, functional leadership etc.) in feedback loops and product demos will frequently increase the likelihood of project success.

Decision-making should not be based on personal agendas but on assumptions validated by the market and frontline (sales companies, Marketing, Product Management) – then quality will follow.

Reduced time-to-market can be achieved by adopting agile practices and by thinking cross-functionally and slicing the project in early and frequent launches.



End-to-end accountability

Product Management is typically organised to assume accountability for the commercial success of products.



Insights

A majority (66%) report that their Product Management function assumes end-to-end accountability for the commercial success of products to a rather high extent.

Remaining respondents say that accountability is present to some extent or to a low extent, leaving some opportunity for improvement.



Key questions

How is accountability sustained throughout the product development process in your organisation?

In practice, does the person accountable also have the authority as a CEO of product development?



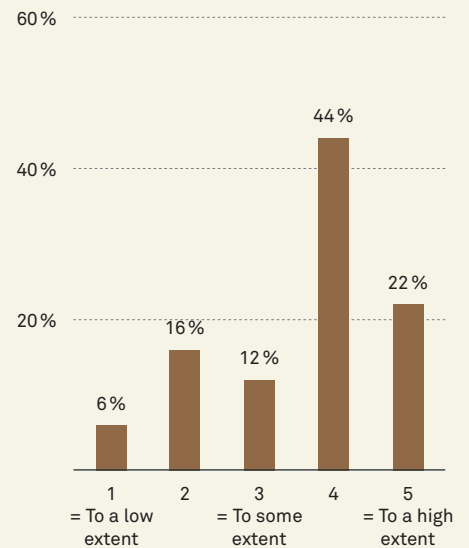
Our view: A single point for commercial success

We believe that it is important to have one “global launch manager/ product owner” holding end-to-end accountability for delivering the commercial success of the developed product.

Handover of ownership across the organisation, e.g. from Marketing to Product Management to Supply etc., increases complexity and reduces efficiency. Handover may create confusion about who does what and when and who really owns it.

Having one point of accountability with focus on building a business and not just a product makes the “skin in the game” much stronger for the person accountable.

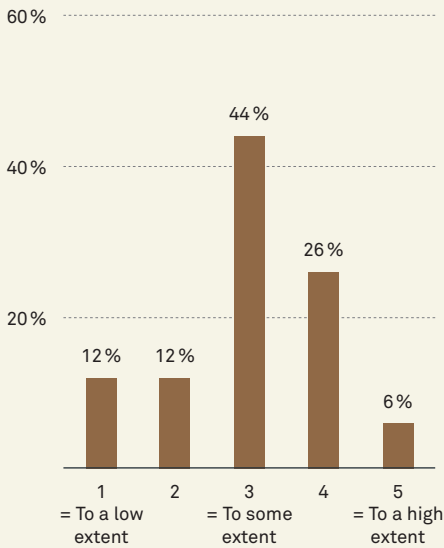
To what extent does Product Management have end-to-end accountability for the commercial success of products?



Product Management contribution to commercial success

Product Management is typically organised to assume accountability for the commercial success of products.

In your opinion, how effective is your Product Management in contributing to commercial success?



Insights

According to the respondents, Product Management contribution to commercial success is moderate. Almost half of them (44%) report that the contribution to commercial success is only to some extent.

The rest of the respondents are almost evenly distributed between to a high extent and to a low extent.



Key questions

How do you ensure that Product Management has the right tools for contributing to commercial success?

What will make Product Management even more successful in delivering commercial success?



Our view: Skills must complement accountability

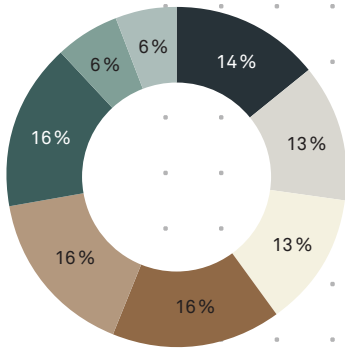
Combining the results of accountability and contribution to commercial success in this report, we see a potential gap. Even though accountability seems to be quite clear, commercial success is moderate, indicating that the success rate could be higher.

Accountability can often be a quite easy thing to fix, given that Product Management takes on the given ownership in practice.

In our view, a more difficult part can be how to navigate the organisation and constantly and commercially lead the product development team towards commercial success.

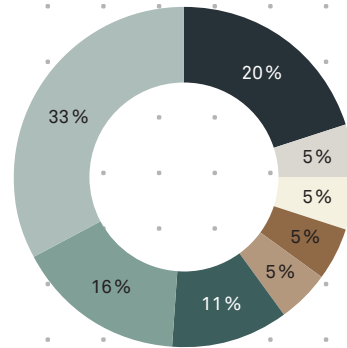
We believe that it requires Product Management/ product managers and the team around them to have the right skills and tools to drive innovation, including being disciplined about getting feedback from the market.

Respondent data



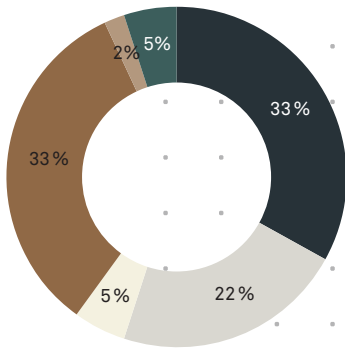
How many employees are currently employed in R&D?

- Less than 25
- 25-50
- 51-100
- 101-250
- 251-500
- 501-1,000
- 1,001-2,000
- More than 2,000



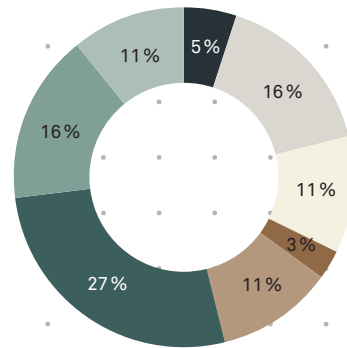
Which industry is your company in?

- Manufacturing
- Healthcare
- Energy
- Automotive
- Building and construction
- FMCG
- Public sector
- Other



What is the total number of employees in your company?

- 251-500
- 501-1,000
- 1,001-2,500
- 2,501-5,000
- 5,000-10,000
- More than 10,000



How many product managers are currently employed?

- Less than 5
- 5-10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50
- I don't know

About the report



The global companies surveyed in this report are all companies that have a strong physical product development focus but some with related services.

Pure service organisations might have slightly different trends in terms of reorganisation and focus on creating a strong development organisation in the future. Please reach out if you wish to discuss your situation.

The respondents hold positions such as VP, Senior Director, Director and Global Head in R&D, Product Management, Marketing and Commercial Excellence.

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