



White Paper

# Product Thinking

When delivering internal products (platforms, packaged software, hardware) to your business

# Summary

Many IT, Development, and Product teams are focused on delivering internal products. Platforms, packaged software, hardware, or custom solutions that underpin the products sold to customers or help employees do their job. They are often stuck serving the businesses – trapped in a world of disparate applications, technical complexity, demanding stakeholders, projects, deadlines, and changing priorities. Always under pressure to deliver and unable to get ahead of the game.

Here's how they might escape... with a **product thinking** mindset shift.

## Product thinking for internal products

Product thinking is at the core of most businesses. It's about having standard products that you build once and sell many times. Companies love this because, as a business model, it's very efficient - it brings economies of scale that maximize profits.

But product thinking isn't often applied to the internal products in an organization – products and platforms that solve real business problems and provide real value for your internal stakeholders.

What's more, by default, internal products are often managed by IT teams – as part of a large estate of applications. And, IT teams typically apply their existing operating model to hit project-related delivery objectives – rather than driving the roadmaps and strategies you need to maximize business outcomes and value. They are seen as a cost center, not a source of strategic value.

This is important, as although your customer-facing products generate revenue, it's your internal products that underpin business success.



*From siloed applications and reactive projects to a product focus*

## How does product thinking help?

Product thinking and the discipline of product management help you tackle the following challenges:

How do you proactively manage internal products to provide a sustainable service to the business? So, moving away from just delivering something on time to thinking about the whole life cycle.

How do you achieve a more commercial focus that drives business success and saves money? The answer includes moving from a 'project' mindset of one-off solutions to a 'product thinking' mindset.

How can you change the focus from output-driven (i.e., when will the next feature be ready?) to outcome-driven, where you help internal stakeholders realize the maximum business value?

How can you take on more of a leadership role to add value to the business? Of course, you need to respond tactically to short-term needs, but you also need a longer-term strategic view as the company develops.

This white paper helps you explore what this can mean in your business.

# Managing internal products

## What is a product?

Before exploring internal product management, it is useful to take a step back to explain what we mean by a 'product.'

Many outside of technology have a simple understanding that a 'product' is something tangible (something you can hold in your hand). But this definition is quite limiting and doesn't work well when thinking about most IT products – after all, you can't 'touch' software. And many companies sell Software as a Service (SaaS) products.

A more useful description is that a product is something that can be delivered multiple times without having to build from scratch each time. It multiplies the value of a delivery – its adoption can scale up without needing to build something new for each user. Therefore, the original development cost is spread over all the product's users.

This doesn't imply that products are unchanging. Indeed, it is likely that the product will evolve to support different types of users – or different usage scenarios.

It is also likely that the product will be augmented with add-ons and configuration options, which means that it better suits customers' needs.

The product itself might be hardware, software, or professional services. And it might be built in-house or sourced from a third-party. Sometimes, it can be a combination of all these things.

## Who are the customers of products?

The most common scenario is that customers of products buy from a third-party (a supplier). For example, a warehouse operator buys a stock management system from a software company. Or a consumer buys their TV from an electronics store. But there are other types of customers, the internal ones. These customers are people working in an organization who take products from an internal IT Development or Product function.

In many organizations, ownership and management of 'internal products' has been down to the expertise and diligence of IT. Although capable and willing, many have lacked the insights, tools, and approaches to make this management effective. Indeed, they may also be restricted by the IT operating model. Other organizations have product managers in place to manage both external customer facing product and internal products.

Table: Examples of external and internal products for a supermarket's technology portfolio

	Used by	Typically managed by	Example Products
External Products	Paying consumers	Product Managers	Online Shopping, Rewards, and Loyalty Programs
Internal Products	Employees, Delivery Partners, Inventory Suppliers	IT, Development or internal Product Managers	Supplier Management, Inventory Management, (employee use of e-commerce platform), scanner and receipt printing hardware, laptops

## Internal products are often critical to the business

At Product Focus, we see many types of internal products.

For example, the internal platforms that underpin the products sold to external customers, such as an e-commerce platform or billing system.

Software services aimed at particular business functions, e.g., Enterprise Resource Planning (ERP) systems like SAP or financial management systems like Sage. Or generic 3rd-party products like laptops or mobile phones.

Some will be custom-built or adapted (which means there will be development work), others configured for the business, and others adopted as they are.

Even though they don't directly generate revenue, they are often critical to the business and, if not appropriately managed, can frustrate plans and impact profitability.

## Models for managing internal products - IT projects

The traditional model for developing internal technology is one where someone in the organization says, "We need this." The budget is secured, and the IT or Development team 'gets on and delivers it.'

It's a project focus – each request is taken separately. The internal customer places an order, and IT or Development provides a service and deliver what was requested.

In this model, it is assumed that the internal customer knows what they need, that their requirements don't change, and that success is delivering as much as possible as quickly as possible.

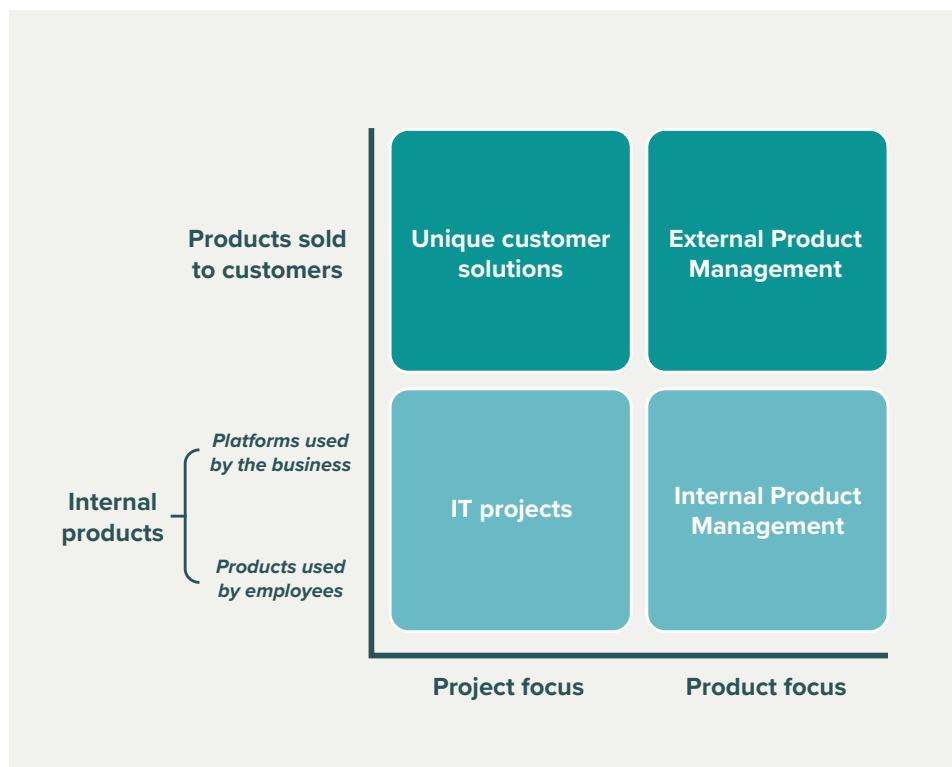
It's a world often challenged to do more with fewer resources, e.g., budget cuts, rather than how we can invest in building capabilities that enable greater value to be delivered to the business.

Internal users are often treated as second-class citizens. They may have to deal with a terrible user experience, and no one thinks it's a priority to improve things. But, although the system works at some level, the overheads and operational inefficiencies created can raise huge hidden costs. Sometimes, whole jobs are dedicated to copying and pasting data from excel spreadsheets into antiquated systems.

## The second model is a product-focused approach

It assumes that an internal customer request is important but one of many and that it's impossible to do everything for everyone, so priority calls are necessary. And helping the internal customer to articulate and make sure that what they're asking for delivers a measurable business outcome is part of the job.

It recognizes that someone must take a balanced, objective view across the organization – and think about the cumulative impact of all internal customer requests. Additionally, they must consider the impact on existing technology infrastructure and long-term support.



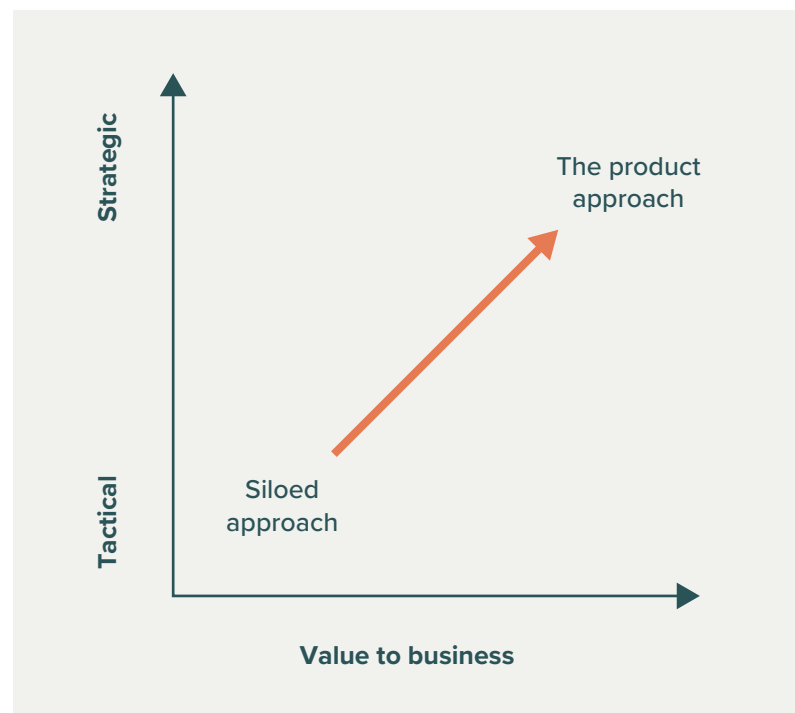
## Why?

As there are always limited resources, someone has to work out:

- what gives the most significant benefit to the business
- what are the impacts on other systems and users
- what the long-term costs and plans are to support and maintain what's delivered
- what's most cost-effective overall

This is the product approach for internal product management. It's product thinking for IT.

It's about moving away from a siloed approach to a more holistic approach that brings more value to the business (and, in turn, makes the role even more important).



## How do you measure success?

It's important for you and your sponsors to put something in place to measure whether the product approach is being successful.

If you've used a business case to justify the delivery of an internal product, then measuring how you're doing over time against the business case forecast is one approach. But what metrics should you use?

The answer is the metrics that make the most sense for your product and that are most helpful to your business. The metrics might fall into areas like user behavior (e.g., takeup), cost saving, efficiency savings, uptime, compliance or security.

For the platforms that underpin the customer-facing products, can you make a link to creating more revenue or having less cost? For example, scaling up transaction volumes so you can take on more customers or having a more stable platform, so you lose fewer customers. Maybe the business cases that exist for the external products based on the platform already contain costs for platform development – or if they don't, they should.

Often the argument is that if we do nothing, there is an increased risk of a bad thing happening. For example, if we don't tackle technical debt, the whole platform may collapse with the next update! Or if we don't stop 'shadow IT' (where departments are buying their own laptops), we can't implement effective security solutions and risk the whole company being compromised. Painting a picture of what would happen if the platform collapsed or there was a serious data breach can very quickly focus decision-maker's minds.

Reducing time to market for new releases, business agility, or the ability to support longer-term product plans can also be very important but are tricky to measure.

Of course, success is not just down to what you're doing in product management – it's based on the performance of a cross-functional business team, ranging from Development to Operations. Objective Key Results (OKRs) may be a good tool to use to get everyone pulling in the same direction.

# The focus of internal product management

We see four key areas of focus, as shown in the dials below:

## Purpose – from 'feature factory' to 'outcome focused'

In many organizations, the IT team is given requirements by internal customers and told to deliver them. There may be little questioning of whether the requirements are truly valuable, e.g., using discovery techniques to work with users to research the best solution.

Similarly, using techniques like MVPs (Minimum Viable Products) and agile methods to evolve to the right solution may not be embedded as a way of working. It requires ongoing and close contact with the end users and the willingness to take time to explore options from both sides.

For example, if the KPI (Key Performance Indicator) for IT is about how much stuff is getting done (and how quickly), that will drive output-driven behavior. If the business uses OKRs, which help align business outcomes across teams, then that should drive value to the business more effectively.



## Leadership – from 'order taker' to 'trusted advisor'

With a product approach, the IT, or technical team changes from an order-taker to a trusted advisor. It moves from the short-term view of reacting to a business request to considering long-term strategic value.

The product approach promotes more holistic thinking. For example: how each request supports long-term business goals; how we aggregate similar requirements more efficiently; how to deal with the risk and cost of a critical 3rd-party supplier letting us down; how we best align our infrastructure and support needs; what is the long-term roadmap for this internal product to support our strategy?

It's about having a more balanced view of internal products. A view that considers the technical issues, our customer and commercial constraints, and operational issues. The balanced view helps us to make objective strategic decisions – that are best for the business.

As a trusted advisor, you can ensure difficult priority decisions are made – changing discussions from *we want this, this, AND this* to *we must choose between this OR this OR this*.

## Ownership – from 'hands-off' to 'full lifecycle management'

In some organizations, all IT or Development does is build or install something, and then another team, like Operations, must support it (and fix any problems). Often nobody has considered the need for long-term management of the solution. Everyone has assumed once it's delivered, it's finished. Bugs and enhancements are an afterthought for which no one has planned.

Internal product managers consider the full lifecycle of a product from development and deployment to in-life. They also consider what will happen when a product needs to be withdrawn, and internal customers migrated to something else. Unlike those product managers selling to external customers, internal product managers don't have the option of telling the customers to 'sort it out themselves!'

So, genuinely owning the product and in-life management through the full product life cycle results in higher quality, thought-out solutions for the business.



## Commercial focus – from 'custom' to 'configure'

The tendency can be to treat each internal request as a separate requirement and to build a unique solution for each internal customer. That becomes inefficient as you multiply the number of solutions you need to support, as well as being slow and costly to do.

The product approach is more efficient. Here, you move from frequent code customization (a project approach) to using or creating standard products that are configured for different users.

Making strategic build/buy/partner decisions (on what's best for the product and the business) is also critical. Here product managers consider the options of **building** to add long-term value to the company, **buying** commercial off-the-shelf software (COTS), which is readily available and more cost-effective, or **partnering** where appropriate.

Another key commercial area is driving a better deal with suppliers by aggregating demand from multiple business areas. Internal product managers have a view across the entire business and are well-placed to manage this.

## If a company has internal products - it's already doing some product management!

One of the first things to realize is that you don't need to have the title Product Manager to do product management.

In many organizations, product management doesn't exist as a function, but plenty of people are doing the work to manage products. A start-up may only have one product and no product managers. The senior management team does most of the product management activities, e.g., working out the sales proposition, setting pricing, and deciding what to build next. In other companies, there are Service Managers who pick up some of the activities Product Managers typically do.

So, if a company has internal platforms/products, software services, or 3rd-party products – someone must be planning what to do, building or buying them, deploying, operating, and supporting them. But, they may not think of themselves as doing product management.



## Some things to consider...

### Internal customers are **difficult** different

**They know where you sit. They work in your company. You typically have many of them, and they might be peers (or senior) to your boss. They expect to get what they ask for.**

**To relieve the pressure, recognize that saying 'Yes' to them means saying 'No' to someone else. Introduce transparency into your prioritization process – everything goes through the same process, which helps you make objective decisions. And work on communicating your plans, so you're not springing surprises on senior stakeholders (they don't like that).**

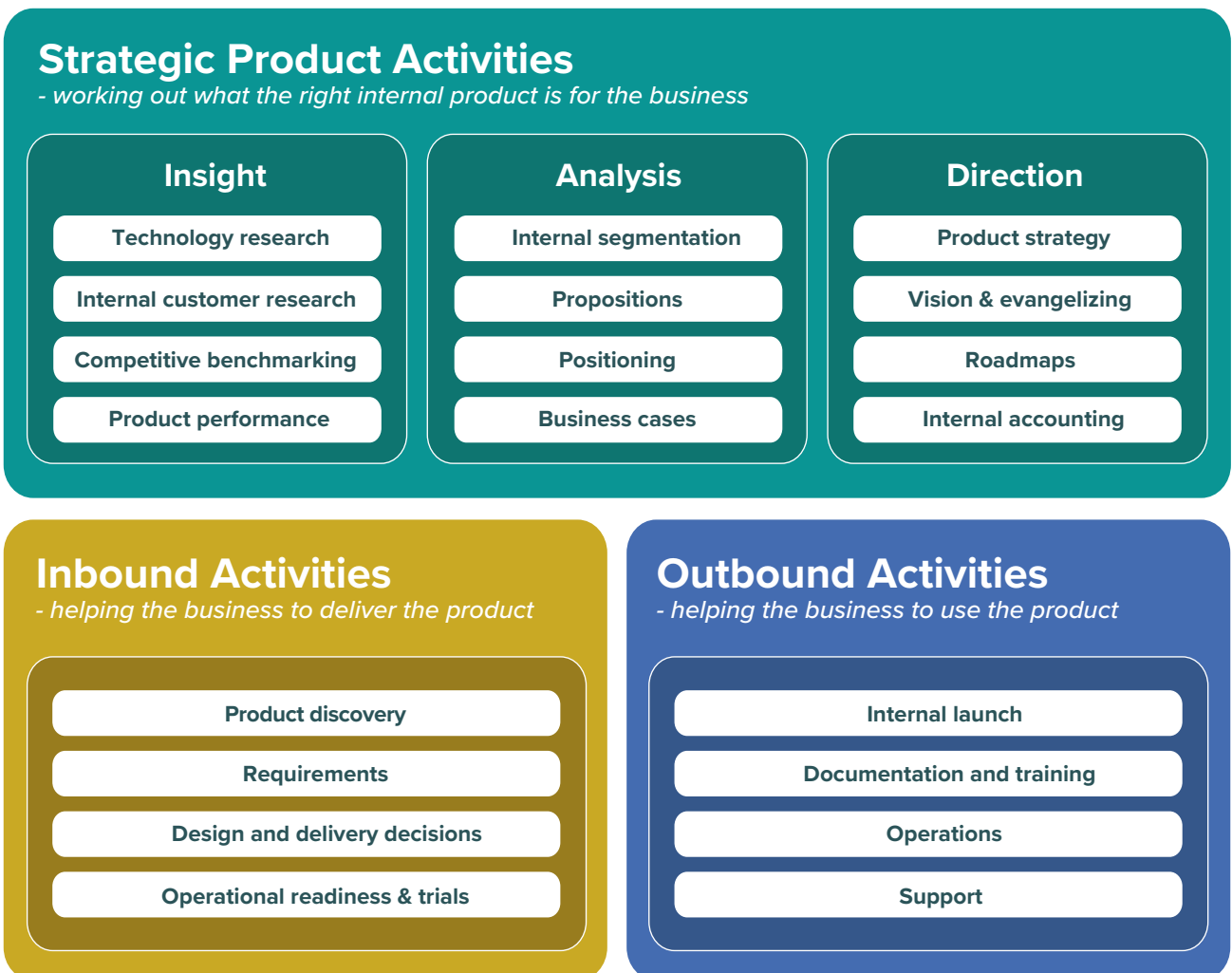
# What product activities need doing?

## Product Activities Framework for internal products

Our Product Activities Framework shows all the activities that should be taking place in any company with products. Most of the activities you do to manage products sold to external customers are equally relevant to internal products. The key difference is that you are dealing with internal customers rather than external customers, and no money is changing hands.

Depending on the type of internal product, some activities will be more important than others, and some will only be relevant in certain situations.

We've created a version of our Product Activities Framework for internal products, as shown below.





# Strategic Product Activities

- working out what the right internal product is for the business

## Insight

**Technology research:** Researching and gathering information, expert opinion, and insights. Tracking market drivers and trends such as technology developments.

**For example,** understanding the landscape for 3rd-party solutions in a particular area.

**Internal customer research:** Collaborating with internal customers (users and other stakeholders) to understand high-level requirements and priorities. Understanding longer-term needs and where something fits in the overall value chain.

**For example,** observing long-term trends from all business units, getting feedback from Operations and Support, tracking satisfaction, and other quality metrics.

**Competitor benchmarking:** Monitoring external (and internal) competitive offerings, including benchmarking and tracking. Understanding strengths, weaknesses, and direction.

**For example,** investigating other 3rd-party systems that could be used instead of current solutions. Monitoring 'shadow IT' (non-authorized solutions that internal customers have sourced themselves) and other workarounds to understand why they are chosen.

**Product performance:** Reviewing data and reports on performance, including analytics, to understand product usage.

**For example,** monitoring platform performance, tracking KPIs linked back to a business case and monitoring adoption rates.

## Analysis

**Internal segmentation:** Identifying internal customer groups that need the same solution. Understanding the size and urgency of the requirements of these groups of users or internal customers.

**For example,** segmenting within the business by specific needs and understanding the numbers of potential users (e.g., providing different laptops to different user groups)

**Propositions:** Creating and capturing new ideas. Analyzing and building propositions for the target internal segments.

**For example,** creating different propositions for internal groups based on the same technology.

**Positioning:** Determining appropriate messaging and positioning against alternative external solutions or internal solutions.

**For example,** how to persuade IT users to use company-provided products rather than shadow IT.

**Business cases:** Writing the rationale for the company's investment in a platform, software service, or 3rd-party solution.

**For example,** comparing external options and producing the financial model, including costs and savings forecasts. Getting impact estimates and buy-in from relevant areas and stakeholders.

## Strategic Product Activities (cont'd)

- working out what the right internal product is for the business

### Direction

**Product strategy:** Developing internal product strategy and plans. Updating management and the wider business.

**For example,** selecting a single solution for use across the whole business.

**Vision & Evangelizing:** Creating a compelling internal product vision. Selling the vision to internal audiences, including stakeholders and users.

**For example,** telling the story of the importance of a key platform to the business. Explaining to users the value of a proposed internal solution.

**Roadmaps:** Deciding on the future direction and priorities for the internal product. Publishing and maintaining roadmaps for users, management, and other stakeholders.

**For example,** regular alignment meetings of the platform roadmap with the product managers (of the external products) that are using it.

**Internal accounting:** Developing and running an internal charging model (if appropriate).

**For example,** how development work is cross-charged across departments – and how the finance team treats it.

## Inbound Activities

- helping the business to deliver the product

**Product discovery:** Gaining a deep understanding of what's valuable to users by exploring a known problem space and validating candidate product concepts.

**For example,** structured approaches like prototyping to define and test ideas with internal users.

**Requirements:** Gathering, analyzing, prioritizing, and documenting internal product requirements. Defining users and use scenarios.

**For example,** platform requirements like performance or scalability. Providing context and discussing trade-offs with developers and internal customers.

**Design and delivery decisions:** Designing and delivering the optimum internal product for the business. Making the build, buy, or partner decision.

**For example,** using iterative agile development to balance development cost, risk, and speed to meet business requirements on features, performance, and user experience. Making the trade-off between dealing with technical debt or developing new functionality.

**Operational readiness and trials:** Managing the roll-out of the internal product, e.g., system and process updates, so the internal product is ready for the business to use. Finding, managing, and negotiating with partners and suppliers.

**For example,** managing an internal trial.

# Outbound Activities

- helping the business to use the product

**Internal launch:** Creating and running an internal launch. Supporting the adoption of the internal product.

**For example,** selecting launch timing, planning for the training of internal users, and building momentum across the business.

**Documentation and training:** Creating guides and presentations to explain how to use the product to internal users and stakeholders.

**For example,** user guides, product descriptions, FAQs, online updates.

**Operations:** Ensuring the internal product performs at the required levels

**For example,** monitoring performance, Service Level Agreements (SLAs)

**Support:** Providing ongoing support to internal users

**For example,** first, second, or third-level support depending on the product.

You can use this tool to check who owns which activity or work out what you need to spend more time on as an internal product management organization.

## Summary

We see a growing trend to adopt 'product thinking' for the management of internal products because of the huge benefits it brings to a business. It's about focusing on building something once and having it used many times, rather than creating lots of customized (and often flaky) solutions – that are costly to support and maintain.

It's about being proactive and providing leadership rather than constantly fighting fires. It's about having a balanced and long-term overview of internal products – understanding the technical and operational issues and the commercial constraints. This helps you make holistic, strategic, objective decisions on what's best for the business. Finally, it's about understanding the internal customers and business well – to ensure that your internal products deliver the right business outcomes.

Ultimately, your customer-facing products generate revenue, but your internal products will throttle your business agility and reduce profitability if you don't have a product focus.

# Helping you and your business deliver world class product management



product

focus

## About Product Focus

Product Focus are global thought leaders in product management and European leaders in product management/marketing training and consultancy for technology-based products.