

# Product thinking at the core of the new IT organization



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# Introduction







If you were to show a list of the of the current Fortune 500 companies to an individual in 1955, they would be hard-pressed to find anything that looks remotely familiar. And who can blame them? After almost 65 years, only 12% of the companies from the 1955 list remain. While the disappearance of some of these companies can be attributed to consolidation, restructuring, or other organizational churning factors, this provides a powerful lesson for established companies – past performance does not guarantee future success and continual adaption to changing market demands is an absolute requirement – otherwise they face extinction.

Many of today's threats stem from digital disrupters (companies that have technology and software product development at their core). It is through this product-centric mindset that these digital disrupters have been able to drive value through ways previously unknown or under-utilized. There is much for chief information officers (CIOs) to learn and adopt from the disruptors about how to apply product thinking and methods to the way IT interacts with the business and its customers and the role IT has to play in the company's products and services.



## EY: “Everything can be a product” definition

A product is a tangible (good) or intangible (service, information, technology) item that closely meets the demands of a particular market and yields enough value to justify its continued existence. It is characterized by its benefits, features, functions and uses that satisfy needs of the consumer.

## Developing a new technology product capability within IT

A product-centric mindset within IT combines conceptual tenets from other IT capabilities such as agile development, service management, IT life cycle management, and from traditionally business driven capabilities such as R&D, product management, and product marketing. In doing so, it forms something unique – an entrepreneurial, fast-iterating approach to managing IT services and solutions as products from ideation to retirement while addressing the product as a whole (Figure 1: Whole product management). This enables more robust and targeted feature sets that center on customer needs, facilitate quicker deployment and validation of emerging technologies, and clearly define service and solution ownership and reporting structures.

In today’s IT environment, IT services and solutions are commonly funded and delivered on a project-by-project basis and following either a waterfall or an agile-with-phase-gates development process. This leads to the all too common problems that are routinely seen in all IT organizations, such as service provider mentality, innovation inhibition, ideas being “thrown over the fence,” lack of customer understanding, etc. A product-centric mindset in IT enables the value of services and solutions to be continually maximized throughout the various life cycle stages by instilling the following tenets:

▶ **Be relentlessly customer-centric**

Understand your customer and focus your efforts on the needs of that customer

▶ **Remain true to your core**

Validate the idea is aligned to your strategy and capabilities; in non-strategic areas, look to your ecosystem to augment your capabilities where possible

▶ **Perfection is the enemy of good**

Consider the minimal viable product concept and, in early iterations, focus on features that deliver differentiated and immediate value to the customer

▶ **Iterate to make it better**

Closely monitor results during the initial product launch and listen to your customer’s feedback to inform your future iterations

▶ **Stabilize and operationalize**

Optimize product performance throughout its operational phase by increasing value, reducing cost and improving customer satisfaction

▶ **Be disciplined in retiring legacy**

Develop a plan to retire products and actively direct and transition customers to new products

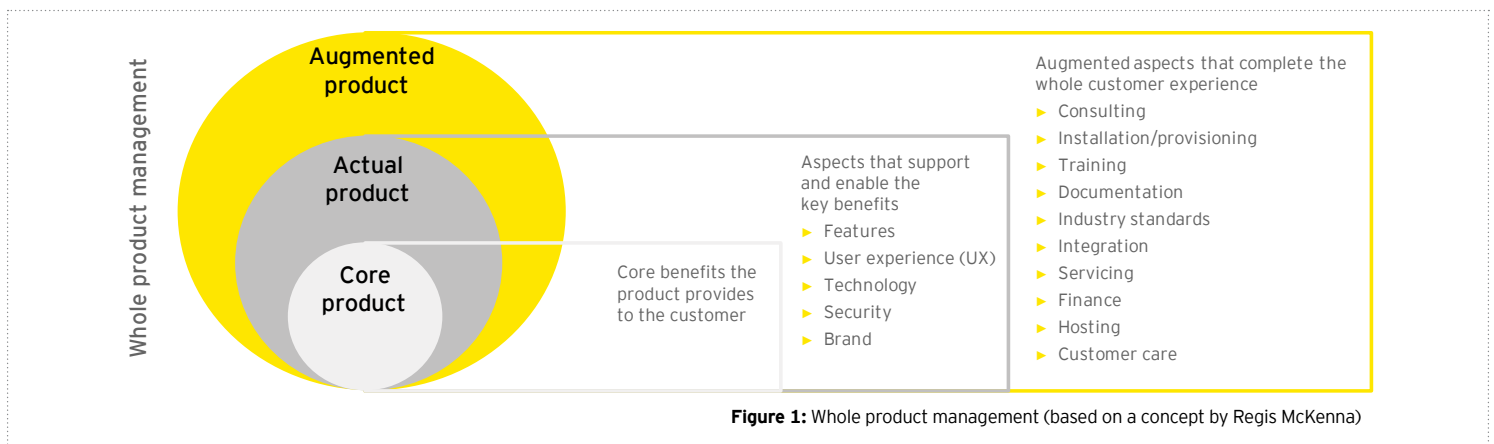


Figure 1: Whole product management (based on a concept by Regis McKenna)

In a world where we are seeing IT’s customers consistently increasing their expectations for technology, a disconnect is fueling the growing gap between business customers of the digital age and the IT departments with their legacy technology and processes. While we rarely see full-fledged adoption of the tenets previously listed, IT can address many of these concerns by realizing an expanded product definition and these basic paradigms as part of a technology product management capability to manage IT as technology products across their life cycle.

## Example: Back-office IT on a product team

A product development organization that implemented agile and works closely with the business relied on back-office IT to provide infrastructure services and integration testing. The product team struggled to include IT team members due to their project-oriented work structure, which led to slower delivery timelines and extra rework.

## Product thinking helps IT organizations enable digital business

The digital revolution is disrupting business models and transforming companies. Consumerization, a key driver in the digital revolution, is directly impacting the perception of IT. As global customers become increasingly comfortable with advanced technologies, the expectation of receiving the same user-friendliness, flexibility, and support from their IT providers as they do from consumer technologies grows. Similarly, business users are demanding that IT services be delivered with the same level of customer focus, continual iteration and updates, and responsiveness that they are accustomed to getting from retail technology products. Furthermore, product managers of traditionally non-technology products are adding technical components to their product lines, which, historically, organizations have frequently relied on IT to deliver. This trend has shown no signs of stopping, and IT must approach the business-IT dynamic in a different way to maximize the value contribution IT makes to the changing landscape.

Meeting these new demands requires large, transformational, cultural, and organizational shifts to leverage a bi-modal, agile development-focused operating and development model. While these shifts can (and must) occur to meet this changing demand independent of a product-focused mindset, the two can synergistically create and drive value that is better appreciated by the customer. The product-focused mindset would instill the continual effort to maximize product value, and the expectation of IT to participate in cross-functional integrated product teams would increase cross-org collaboration. As a result, IT would be better equipped to tackle the following challenges through a product-centric mindset: the shift from project-centricity to product centricity, the concept of business and IT integrated agile product teams (Figure 2: Cross functional integrated product teams), an increased need to understand market and consumer needs by the technology delivery teams, as well as the need for an IT culture that enables innovation, agility and alignment to product strategies.

It is important to know that a company starting on this journey can pace the way they embrace product management. In many cases, both product and project management can be relevant disciplines and exist in the same organization side by side. The fundamental difference between the two approaches is in the amount of ownership and autonomy that the delivery teams have within their approved budget and timelines.

Figure 2: Cross-functional integrated product teams





## Product thinking solves common digitization and transformation challenges

### ► Moving from business-serving IT to business-integrated IT

Product management requires that the product sponsor, the product team and the consumers collaborate throughout the product life cycle to ideate, develop, launch and optimize the technology product, leading to more stable and organizationally diverse product teams that integrate business and IT members.

### ► Enabling faster innovation and adoption of emerging technologies

Product thinking provides the ability to ideate, experiment and prototype ideas to solve a market or business need. It puts the consumer at the center of any effort, leading to an increased understanding of the market and business space, as well as the opportunities to identify and test the use cases for new technologies.

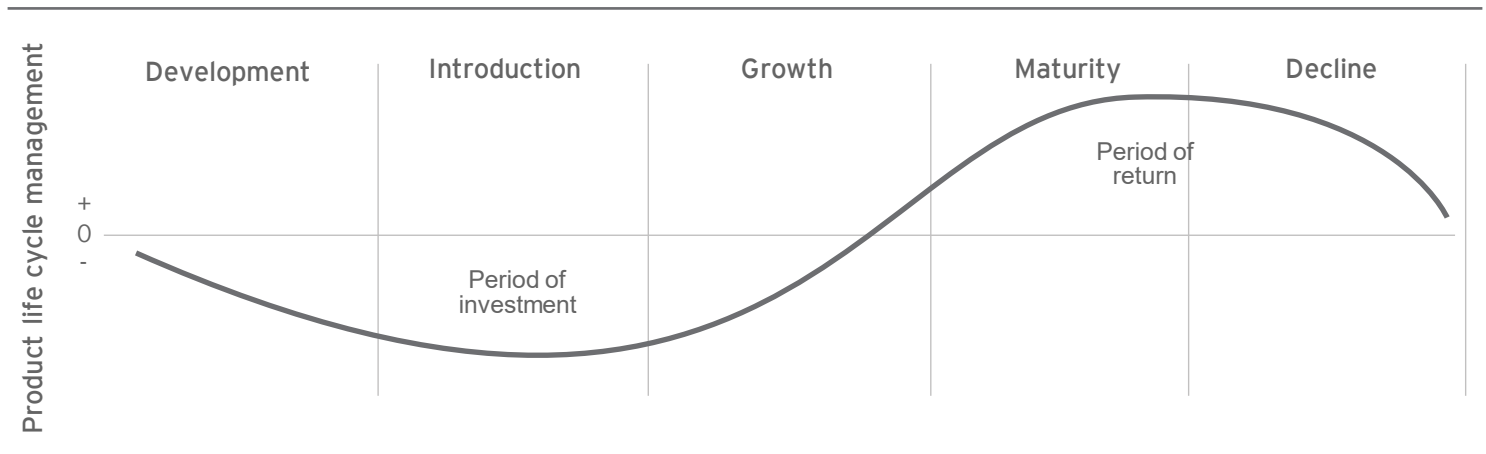


Figure 3: Product cash flow and product life cycle

### ► Managing business solutions from the moment they are conceived as ideas

Product managers are empowered to drive and enable the ideation process with market insights and to assess ideas for their market fit. Enabling this during the ideation phase results in earlier participation of IT professionals such as architects, engineers, data scientists and UX designers, leading to a better, more well-rounded solutions and an increased IT ownership of business-enabling ideas.

### ► Streamlining solution portfolios

Product portfolio management naturally promotes asset benefits as it drives lower-value products toward the end of life, be it a retirement or upgrade. The end-of-life stage is an integral and natural part of the product life cycle, the recognition of which allows budgeting the decommissioning efforts into the initial business case and creates the opportunity to plan new ideas and products on the product portfolio road map for the future.



► **Achieving agility and continuous delivery**

The product life cycle improves agile adoption – one reason why many agile methodologies reference product management terminology – and can enable better integrated agile product teams (Figure 4: Sample multi-track agile product team) through the consistent product role representation that agile teams need. Embracing the concepts of minimal viable product (MVP), incremental value, and continuous integration/continuous delivery (CI/CD), products are allowed to evolve at pace with continuously changing consumer needs.

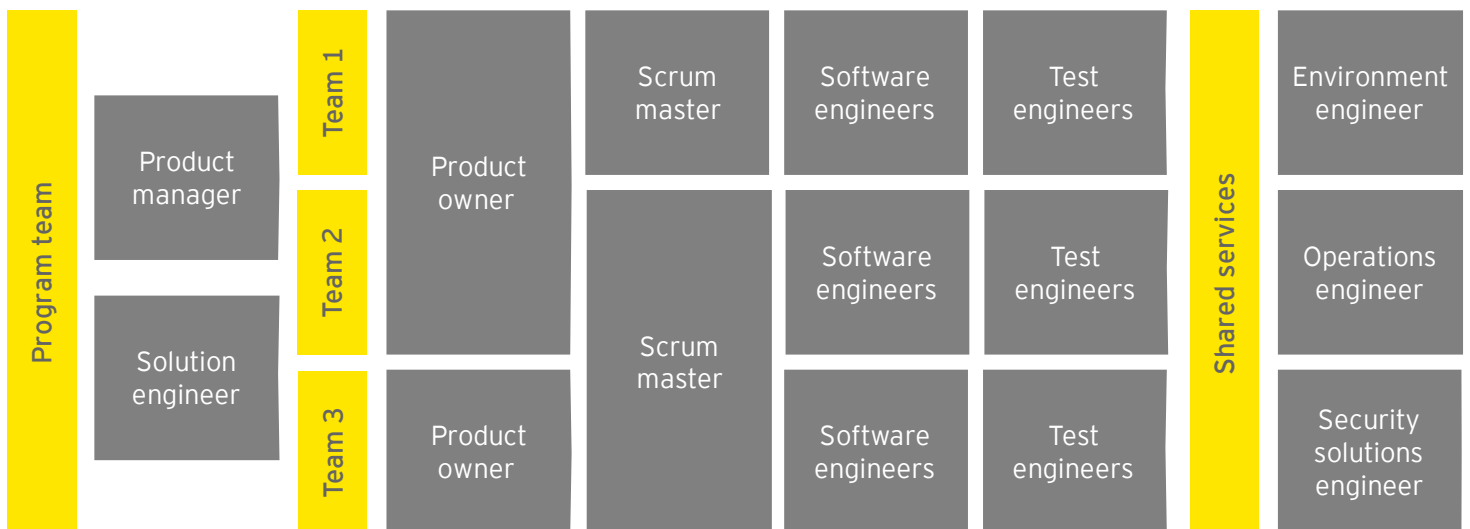


Figure 4: Sample multi-track agile product team

► **Funding strategically and allocating tactically**

Product-line funding enables multiyear investments to be allocated for the full lifecycle of the product(s), bringing total cost of ownership data and revenue/value expectations to the IT investment decision and facilitating IT financial transparency. The product team gets the flexibility to experiment, deliver the MVP, launch the product, optimize it and retain the funds to finance a controlled end of life. The accountability for value generated from the funds allocated is secured through the consistent presence of a product manager across the life cycle.

► **Impacting revenue and enabling alternative business models**

Product value tracking enables IT organizations to be recognized for the revenue they have enabled and to generate revenue directly through the adoption of alternative business models. This not only directly impacts the organizations' bottom line, but it increases the visibility into IT's attributable portion.

► **Succeeding at customer-centricity**

Product management recognizes the customer must be at the core of the product, with their perception of value being the driver for developing and maintaining the product. The product manager understands and meets the customer needs through the product management toolset: market and competitor research, customer segmentation and personas, and focus group testing of products.



## **Client success story: telecommunications**

A telecommunications client achieved material success applying the product management mindset to their IT by merging their traditionally separated IT and product development business units. Under the product development leadership, the new, integrated function yielded significant organizational and business value over a very short time frame, specifically decreasing time to market, increasing the technology innovation adoption rate, and increasing customer and user satisfaction ratings.

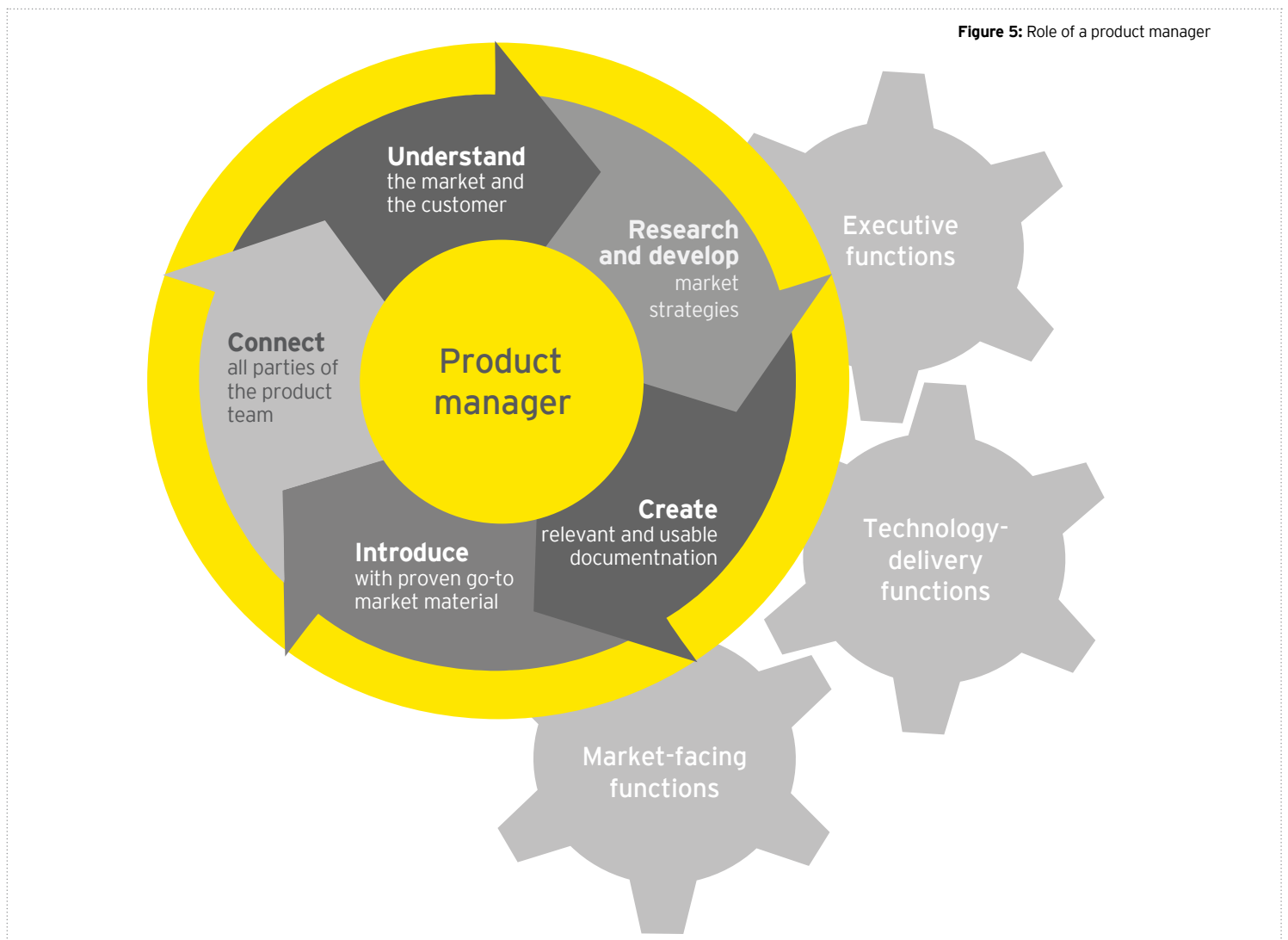




## Operating model impact

Embracing product management will have a large impact on a company's technology operating model. On the organizational level, the creation of the product manager and product owner roles requires new and improved skill sets (Figure 5: Role of a product manager), combining an understanding of the customer's perception of value with the ability to ideate, plan and launch products in a way that bolsters the chance of their success. These market-oriented and customer-centric skills are traditionally hard to come by in IT organizations and sometimes it is more beneficial to upskill business users to the workings of IT rather than vice versa.

The product focused IT organization will also need to develop or source new capabilities to design the customer experience, test ideas using wireframes and prototyping, and conduct market, customer or consumer research to identify those ideas and features that will delight customers. Processes and governance will also need to adapt to accommodate products with longer investment cycles that benefit from self-governed and persistent product teams. In order to measure product success, new performance metrics to reflect customer satisfaction and value generation will also need to be established. Coupled with new technologies to add telemetry and instrumentation to products, product teams will be able to stay on course without sacrificing agility or velocity. Lastly, a cultural shift toward a more entrepreneurial, customer-centric IT will empower and embolden the innovators and doers, fostering and actively shifting to a product mindset.

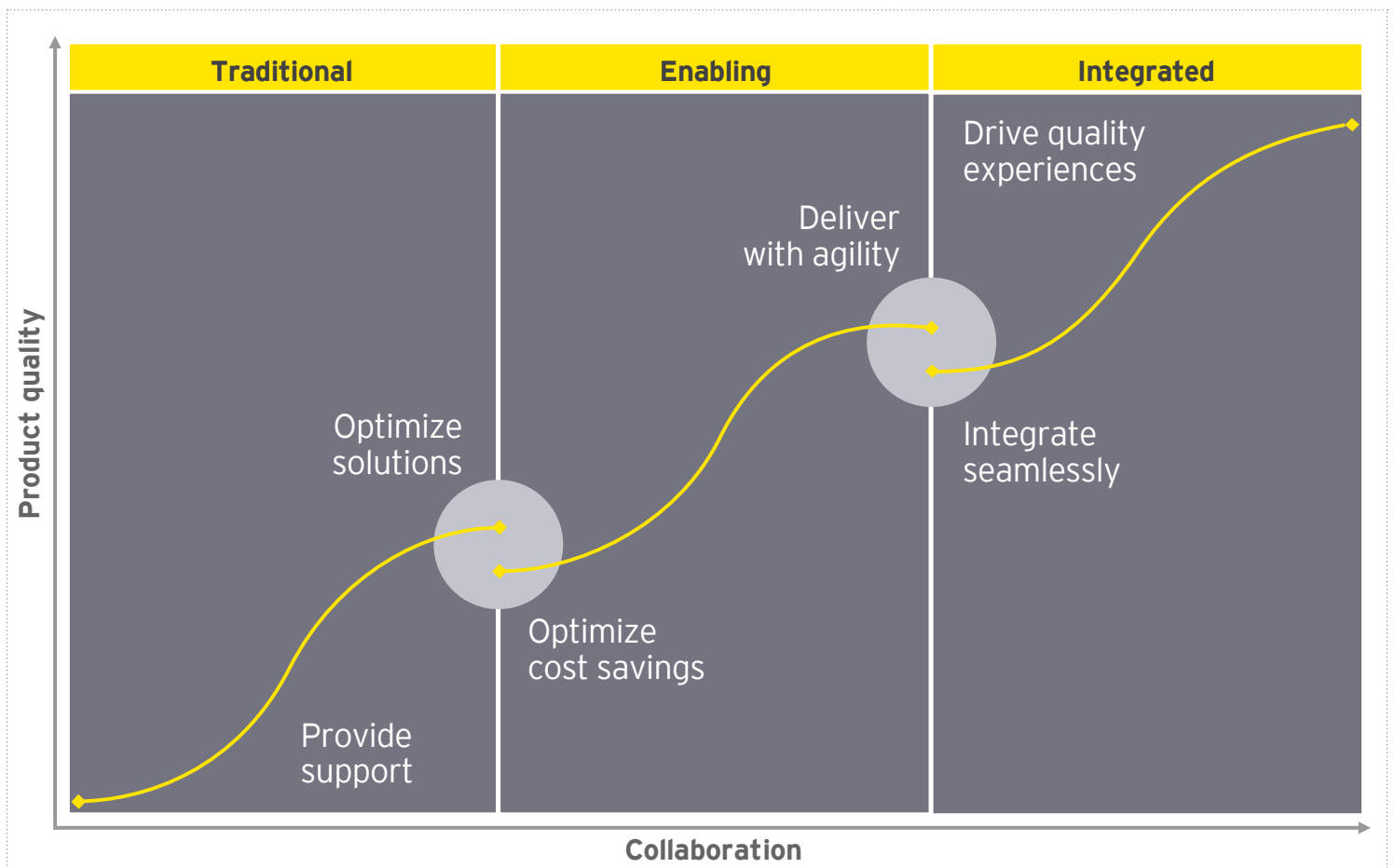


## Outlook and next steps

Digital enterprise is the “new normal,” and legacy IT organizations are finding they have to reinvent themselves to catch up. Third-party IT services are actively marketed to the business and are frequently becoming easier and more cost-effective options than the services that the existing IT organization currently provides. Only the IT organization that embraces product thinking and puts its business customers first will bridge the growing gap between what customers want and what IT delivers (Figure 6: Product thinking is a key component of the evolution toward an integrated product IT).

The journey begins with laying out the product strategy for IT, including developing a fitting product definition and defining the new or modified roles required to stand up integrated product teams. The change from a project focus to a product-centric mindset is, first and foremost, a cultural one, and it is enabled by organizational, process, skill and technology changes, similar to any transformational effort. Shifting the governance responsibility for tactical decisions around design and budgets to the cross-functional product team is a proven means to enable the cultural shift and embed the deeper personal responsibility for the success of the product and of its customers. It is these personal ties that drive such passionate optimization efforts and have a quantifiable impact on the bottom line.

Instilling and deeply integrating product thinking within IT enables better integration with the business, increased transparency on value and opportunities of technology on the enterprise and customer-centricity – all of which are common stumbling blocks for IT organizations. Companies that undertake the product-thinking journey will see value in the improved overall perception of IT and will gain a competitive advantage when tackling the challenges of the new digital revolution.



**Figure 6:** Product thinking is a key component of the evolution toward an integrated product IT

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