

The enterprise guide to platform thinking

What it can do for your business

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Introduction

When it was first published in 2017, <u>The Art of Platform</u> <u>Thinking</u> clearly laid out the power, potential and business value of platform thinking. Simply put, platform thinking is product thinking applied to digital platforms. It puts the platform customer (whether internal or external) at the heart of your decision-making when you're planning what you build.

At the time, platform thinking as we know it today was a relatively new concept. Since then it's become widely adopted, practices have evolved and a handful of global super apps, products and brands have demonstrated just how far the value of platform-based approaches and delivery models can extend.

Amazon, Uber, Netflix, Alibaba, Spotify. They're all platform-driven businesses that have achieved unmatched success and grown their organizations to an immense scale in an incredibly short space of time.

Understandably, standout success stories like those have attracted a lot of attention to digital platforms and helped drive its adoption. Organizations are eager to harness similar capabilities, lay the same kinds of flexible and scalable foundations for growth and follow in their footsteps. But practically, the majority of organizations don't need to scale to the size of those leaders to start seeing significant value from their digital platforms.

Regardless of your scale, digital platforms have the potential to help you tackle some of today's biggest operational and technological challenges, while also nurturing innovation and supporting growth. Platform thinking opens up new possibilities

for companies that want to scale at speed and achieve rapid growth, while providing flexible access to shared services and business-critical capabilities, helping organizations innovate and make strategic pivots quickly.

But for every success story that's out there, there are numerous cautionary tales of companies that have tried to replicate what they see on the surface (the platform build), without understanding the tenets that underpin the success of the platform (platform thinking).

Harnessing the power of platforms is a journey. To navigate it successfully, organizations must continuously ask the right questions, while building up a clear view of exactly what they want to achieve. From there, they can start making the right changes in thinking, technology and processes to ensure their platform ultimately delivers on expectations and helps the business achieve its desired goals.

In this paper, we'll walk you through the common business challenges that platforms and platform thinking can help solve, diving into what they can ultimately do for you and five tenets of platform success that can help you realize their full value and potential.

What is a digital platform?

The term 'platform' is ambiguous. If there are three people in the room talking about platforms, that word will mean five different things. Many organizations don't know the kind of platform they really need. So, as a starting point, let's establish what we mean when we use these terms:

- Platforms are technology foundations that accelerate an enterprise's ability to deliver value for its people and its customers. Practically, a platform could be a suite of applications, a business model foundation that anyone can develop on, or any digital foundation that enables easy access to business and technical capabilities.
- Platform thinking is the organizational and operational evolution required to both bring platforms to life successfully and get maximum value from them. It's the fundamental thinking behind making assets and capabilities as easy to access, iterate on, experiment with and convert into customer value as possible.

The two are intrinsically linked. And when one is separated from the other — most typically, a platform is deployed without adopting and applying platform thinking — it results in unrealized return on investment. We use the term digital platform strategy to define the combination of a digital platform with platform thinking.

At Thoughtworks, we broadly categorize <u>three types of platform</u> <u>builds</u>, each able to serve different organizational needs:



Developer-focused infrastructure platforms



Business capability platforms



Platform business models

- Developer-focused infrastructure platforms that provide a 'paved road' to production, increasing technical quality, improving time to market and mitigating risk through a common, validated approach to security and compliance.
- Business capability platforms that accelerate new product development by providing a set of Application
 Programming Interfaces (APIs) that capture existing business capabilities. These platforms make it easier to mobilize and combine capabilities to create new products in response to customer demands, helping organizations directly target outcomes like customer engagement and satisfaction, and ultimately revenue.
- Platform business models where a company creates value by facilitating interactions among consumers, peers and service providers, with all participants benefiting from a 'flywheel' effect as the platform grows and scales.

"In platform engagements, the first questions we ask are often the most important. They help us understand what the business really wants to achieve, which is critical for both building the right kind of platform and making sure that we help their organization and thinking evolve in the right ways too."

Shodhan Sheth, Enterprise Modernization, Platforms and Cloud Lead, Thoughtworks UK



How do you know you need platform thinking?

Let's look at a typical organization that should consider a platform thinking approach to their platform build. After a generation of 'move fast and gain market share' sales strategy, their tech estate has become both wide and deep — featuring multiples of the same type of application, rushed to market to meet short term requirements.

Their product and engineering organizations have struggled to manage the combined overhead stemming from increasing technical debt, and ongoing product development. They're also experiencing a combination of some of the following common failure modes that slow modernization efforts as organizations scale:

Architectural entanglement

Having deployed numerous systems and solutions over the years, and integrated many more following multiple acquisitions, this organization has accrued significant architectural complexity. This entanglement of architectural elements limits interoperability, stifles innovation, and creates monoliths that continuously grow more costly to run. The default response to discussions about investing in fixing this leads to delays — 'next time' or 'next financial year'.

Innovation debt

When you explore and lead a wide range of innovation projects, not every one of them will have strong results and demonstrate clear value. Having made extensive efforts to innovate over the years, the organization has been left

with several programs and deployments that ran on too long, haven't delivered their intended ROI, and have further complicated their infrastructure and IT estate.

Misaligned talent and organizational structures

An organization's talent and structure need to be well aligned with each other (the right people in the right teams), and digital strategy. Following multiple mergers and acquisitions, the organization is suffering from misalignment between the two. Having acquired cutting edge small businesses to bolster tech capability, those teams find themselves pushed to the back of the queue in the larger organization, or worse, forced to adapt to a slower more bureaucratic way of working that serves little purpose beyond alignment.

Missing cultural transformation

Even the most powerful technologies can't drive transformation on their own. To have the right impact on the business and generate value, digital change needs to be supported by cultural change — ensuring that people are empowered and able to work in ways that best suit the new capabilities you deploy or create.

Transformation fatigue

Having gone through numerous significant digital and organizational changes, teams across the organization have accumulated transformation fatigue — making it harder to secure the adoption and buy-in needed to make any kind of digital transformation successful.

Slow speed to market

Slow processes and complex architectures combine to significantly hinder speed to market. The organization is struggling to bring new software and services to market as quickly as they would like to. Lack of speed is felt all the way from enterprise prioritization, to budgeting, to decisions on business cases, to product development where developer teams are highly dependent on people outside their domain to complete features.

- Inability to pivot to disruptors and market changes
 Slow speed to market and complex, inflexible technology foundations in turn combine to limit organizational agility.
 When new disruptors and black swan events emerge, the organization cannot respond quickly.
- Slow adoption of new technologies and modern techniques
 For the same reasons, the organization is also unable
 to respond quickly to emerging opportunities. Even though
 they're aware of new technologies and techniques that could
 benefit their business, they're unable to adopt and apply
 them at speed to gain the maximum competitive advantage
 from them.

As a result, the organization is now at an inflection point. They've got an important decision to make. It's likely that they'll double down on their rapid customer and market growth through competitor acquisitions. But to speed up and succeed in the long term, they need to apply some long-term thinking to their tech estate.

Deciding to build a platform is a natural choice for organizations in positions like this. But if they don't adopt platform thinking alongside the platform they build — creating a digital platform strategy — they can unintentionally slide into building a new monolith that simply increases tech debt further.

What can platform thinking do for you?

There's a reason why platforms have become so widely adopted and discussed in recent years. Digital platforms that incorporate and support platform thinking are incredibly well positioned to help businesses tackle many of their biggest digital challenges and achieve some of their most lofty strategic goals.

Digital platform strategies, that combine platform thinking with platform building, help organizations strategically tackle their technology debt, address the pain points that are slowing down product development and delivery, and build a more flexible base for long-term growth.

The combination of digital platforms you build — **developer-focused infrastructure**, **business capability platforms**, **or business models** — and what you do with them is governed by the needs of your business. A well-planned and executed digital platform strategy that supports your business strategy and puts platform thinking at the forefront can consistently help you:

- Accelerate delivery by empowering developers with access to critical business capabilities and supporting rapid development approaches.
- Share critical business capabilities across the organization and remove the need for teams to create their own similar capabilities — cutting costs and optimizing spend by eliminating rework and effort duplication.
- Enable experimentation and break down silos to ensure that teams can easily access the data, services and capabilities they need to drive innovation.

- Embrace the ecosystem and create new revenue streams by opening your doors to cross-functional and cross-organizational collaboration and becoming part of ecosystems like shared marketplaces.
- Scale with ease and quickly expand and replicate capabilities and services as your needs and the environment around you evolve.

"Platforms and platform thinking aren't cure-all solutions. They're conduits and catalysts for your strategic goals. To harness their full potential and realize their full value, they must be designed and built with your unique goals in mind."

Rachel Laycock, Global Managing Director, Enterprise Modernization, Platforms and Cloud

So, if platforms and platform thinking can help organizations become faster, leaner, more agile and more responsive to change, while simultaneously cutting costs and enabling continuous innovation and the rapid delivery of new products why isn't everyone on this journey seeing these benefits?

The five tenets of platform success

The potential value of platform thinking alongside platform building is undeniable. But, to realize that value, you need a strategy that looks beyond building the platform, one that helps your entire organization evolve to get the most from whatever platforms you choose to create.

Here are five tenets that are instrumental to the success of any platform journey:



Tenet 1:

A clear vision and value hypotheses



Tenet 2:

A coherent digital platform strategy



Tenet 3:

Product thinking



Tenet 4:

New ways of working and team structures



Tenet 5:

Careful change management



Tenet 1: A clear vision and value hypotheses

From the earliest stages of their platform journey, organizations need a clear idea of exactly what they want their platform to help them achieve. Because the definition and potential of platforms are both so broad, it's this vision that provides the specific direction for every decision throughout the process.

If goals are vague — such as becoming a platform business — the chances of achieving them are reduced. But, if they're well-defined and clearly linked to business goals and value that the entire organization is invested in realizing, platform plans are far more likely to stay on track and deliver what the business wants them to.

Defining a clear vision for your platform isn't just helpful when planning and scoping your transformation. It also helps you create your own definition of success that's easy to track. By clearly establishing the challenges and pain points that you'd like your platforms and platform thinking to help solve, you'll be able to tell if your plans are delivering value.

Establishing a modernization scorecard that considers Business, Customer, Talent and Technology metrics is a simple step that can make it even easier to track the success of your efforts across all aspects of your vision.

An enterprise modernization scorecard



Business metrics

- Reduced time to market for new products
- Improved speed and capacity to create innnovative products and services
- Increased sales revenue
- Improved data insights or business intelligence
- Short-term cost savings
- Long-term cost savings



Customer metrics

- Improved customer experience and self-service
- · Improved customer retention
- Improved customer acquisition



Talent metrics

- Increased automation and employee productivity
- Improved talent recruitment and retention

Technology metrics

- Improved IT agility and ability to respond to business needs
- Improved reusability of technology components or business services
- · Improved security and infrastructure
 - uptime and the average MTTR
- Reduced technical debt for current applications and change failure percentage
- Decoupling monolithic applications; allowing individual team releases and increasing deployment frequency



Tenet 2: A coherent digital platform strategy

As we've established, platform success takes much more than just technology. But, technology is still a very important part of the picture. Your digital platform strategy — what you choose to build, how you build it and how it's maintained and expanded as your needs and capabilities evolve — is crucial to your success.

Platform strategy is a whole discipline of its own, with many factors and dimensions that you'll need to carefully consider. This is an area that Thoughtworks has put a lot of time and effort into defining — creating multiple <u>blueprints</u> and <u>frameworks</u> that can help guide the creation and execution of your own strategy.



Tenet 3: Product thinking

As we stated at the beginning of this paper, platform thinking is product thinking applied to platforms. Therefore it stands to reason that platform thinking and product thinking go hand-in-hand. Product thinking leads teams to continuously seek out new opportunities to deliver customer value, iterate on products, react quickly to changing conditions and bring new products to life at speed. Platforms provide the technology foundation for them to do that.

With a platform in place, teams can start to apply product thinking at multiple levels. The platform should enable them to experiment with products and create a culture of continuous innovation and delivery that in turn continuously creates value for the business. If teams don't embrace product thinking alongside platform thinking, a lot of the potential customer and product-side value that platforms can deliver won't be realized.

On the other hand, failing to treat platforms as products typically leads to poor uptake within the organization, bloated interfaces, and platforms that ultimately miss the mark. Remember that adoption, not the platform itself, is the goal.

Product thinking applied to platforms (platform thinking) results in platforms that are themselves treated as products. By continuously assessing how well platforms are serving customers, organizations can continuously improve and iterate on their platforms, exactly as they would with any other product they offer.



Tenet 4: New ways of working and team structures

Platforms and platform thinking have the potential to change how your organization works — from delivery processes, right the way up to your business models. But, if you want change like that to happen, you need to facilitate it.

In some cases, platforms introduce new operating models, fundamentally changing the way that business, product and technology strategies align to create value. When that happens, organizational structures need to evolve to support the platform. Teams may need to be reorganized, new domains may need to be created and workflows will need to evolve around the platform, to enable everyone to use it to its full potential.

In many cases, organizations underestimate the full scale of change that's required. For example, they may wrongly believe that to adapt to the platform, it's only the engineering team that needs to adopt agile practices and ways of working. However, in reality, those practices will need to be adopted by a wide range of teams across the organization. Platform thinking and agile practices are well-aligned and trying to retrofit legacy ways of working with a new digital foundation can be like trying to fit a square peg into a round hole.



Tenet 5: Careful change management

Building platforms and adopting platform thinking represents a significant change for many organizations — and one that will impact people at every level. Those people need to be carefully guided through the transition to ensure they adopt the platform, buy into it and understand how their personal workflows will change as a result.

Without that guidance, platform adoption can fail to get off the ground, which naturally means that the value of the platform never becomes realized — a pitfall many organizations have fallen into.

Getting to results

A digital platform strategy, from a business value perspective, is a long-term play. It provides the foundation for long-term success and requires shifts in ways of working and thinking that can take a lot of time to embed as your new normal. However, that doesn't mean you shouldn't see rapid returns.

Across many of our client engagements, we've seen consistent long and short-term success by following a Thin Slice approach. The idea behind this approach is that by selecting a constrained use case and delivering it quickly, you can learn important lessons and deliver value quickly while demonstrating the potential value of a wider transformation.

The ideal slice should look more like a wedge — thin in its scope, making it easy to deliver, while wide in its potential value, demonstrating what platform thinking can do for stakeholders across multiple domains. In the case of platforms, we're looking for use cases that can impact more than just developers or line of business teams alone. Typical thin slices involve exposing a set of specific capabilities to multiple user groups, along with supporting change management and new processes to help them translate those capabilities into value-adding outputs.

Before you can select that slice you need to carefully assess where your organization is across the five tenets. From there, you can put together a long-term plan and devise short tactics to bring your organization in line with the tenets that are missing. If you don't get that foundation in place, you risk sliding back into focusing on building the platform instead of ensuring platform thinking is being properly embedded into your ways of working — a step that's essential to long-term platform success.

"One of the biggest ways that we've seen thinking around platforms evolve over the last five years has been the increased appreciation of platforms as a source of long-term value. More and more organizations are realizing that this isn't just something they can deploy immediately and transform their organization overnight. It's a far more strategic evolution and one with the potential to deliver huge value over many years."

Sunit Parekh, Services and Demand Lead, Enterprise Modernization Platforms and Cloud, Thoughtworks India



Platforms are the means, not the end

Platforms — much like any other technology or architectural paradigm — are what you make of them. While a lot of the discourse around the growth of platform businesses has positioned platforms as an inherently transformational technology, that's not automatically true.

Their power lies in the efficacy and intentionality of their application and how well an organization evolves to make the most of the opportunities they create. While platforms can certainly add value by improving access to capabilities and helping organizations overcome tech debt, it's the changes you can make around them and the ways that they can enable your entire organization to evolve that will shape the value you'll see. Platforms are built for evolution.

That's why we primarily look at the platform opportunity through the lens of platform thinking. That's where the opportunity truly lies. Digital platform strategy and the platforms you build are just the vehicles that help you get there.

There are three actions you can follow today to ensure that your platforms deliver their promise of long-term value creation and support your organization and customers long into the future.



1. Continuously reevaluate your business needs and evolve your platform to support them



2. Make product thinking a priority



3. Make sure your teams are well aligned with your platform goals

1. Continuously reevaluate your business needs and evolve your platform to support them

Your platform journey may have begun with a clear vision of what you'd like the platform to help you achieve. But, your strategic priorities are more than likely going to change over time. So, when they do, your platform needs to evolve alongside them.

By frequently reevaluating your business needs and identifying new enterprise challenges that you'd like to solve, you can build an evolving roadmap for your platform. Using that roadmap, you can consider future needs and proactively build the capabilities that your organization will need in the near future, as well as exposing a greater number of trapped or siloed existing capabilities.

That pattern of thinking can also help you avoid sunk cost fallacy. By frequently reassessing how well your platform is serving the business and your customers, you can make informed decisions about its future, rather than sticking to the path you're already on just because you're already on it. Platforms are built to adapt, so it's up to you to adapt them when they're no longer aligned with your needs.

What you end up with is a continuous cycle that leverages the flexibility and composability of platforms to ensure that your organization always has the capabilities needed to stay at the forefront of your market.

2. Make product thinking a priority

Another factor that will determine how well your platform evolves is how you adopt and apply product thinking across your organization. Product thinking is better aligned with platform thinking than traditional development practices. Instead of handing off finished software, teams are continuously looking for ways to improve the products and services the platform provides and iterate on them.

By embedding product thinking across the teams that work with, build and maintain your platforms, you can enable them to make the most of the opportunities those platforms create. Instead of viewing the products they create (and the platform that sits beneath them) as finished deliverables, teams can instead continuously experiment and iterate on them to solve new challenges and create value in new ways.

That's one of the key strengths of platforms, but if you don't make product thinking a priority, you won't see their full business value materialize for your organization.

3. Make sure your teams are well aligned with your platform goals

Assigning a team to manage a platform doesn't automatically make them an effective platform team. If the teams closest to your platforms aren't empowered to iterate on them, or aren't in touch with what your organization wants to use its platforms to achieve, your platforms will stagnate, offering and adding minimal value.

Thoughtworks advocates for platform engineering product teams that are focused around a clear and well-defined product offer. Rather than just maintaining the platform, platform engineering product teams can apply product thinking to iterate on and enhance the platform. They're continuously working to improve its outputs, not just keep it operational.

Crucially, as platform thinking requires you to manage and approach the platform as a product, it will also require a defined owner — like any other product in your organization.

"Platforms themselves help you understand business and product performance. The platform generates the insights you need to improve it.

By monitoring those insights, you can create a virtuous cycle of continuous improvement."

Gunjan Khandelwal, Service Line Lead, Enterprise Modernization, Platform and Cloud, Thoughtworks India

Platforms and the Modern Digital Business

Throughout your platform journey, it's important to keep in mind that building a platform and the adoption of platform thinking aren't the endpoint. Rather, they're the means to becoming a more agile, responsive, value-driven, lean and intelligence-driven organization — what we describe as a Modern Digital Business.

The five tenets of platform success align with the five building
blocks of the Modern Digital Business
Modern Digital Businesses
modern Digital Business
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By following the tenets of platform success and considering them all as part of your platform journey, you can impact your organization in a far wider way than just laying a new flexible digital foundation for rapid growth — you can become the kind of organization that's architecturally, culturally and operationally prepared for whatever tomorrow may bring.

"Our Modern Digital Business framework encapsulates qualities and capabilities that will be essential to business success over the coming years. Platforms and platform thinking alone don't automatically create a Modern Digital Business, but they are incredibly important and valuable aspects of the kind of organization that millions of businesses aspire to become."

Sarah Taraporewalla, Director of Enterprise Modernization, Platforms and Cloud, Thoughtworks Australia



Plan your path to platform-driven success

With the potential to help solve major technology challenges, accelerate software delivery, support innovation, enable customer-centric product creation and create new revenue streams, very few businesses can afford to overlook the opportunities that platforms and platform thinking represent.

They're key capabilities that can help you on your journey to becoming a fast, agile and resilient Modern Digital Business. But how you use them is up to you.

As you embark on your own platform journey, the results and returns you see all hinge on the vision you define, the problems you want to solve, how well you facilitate operational and organizational evolution and your long-term commitment to platform and product thinking.

It's a complex journey, but it's one that Thoughtworks has a lot of experience helping organizations around the world navigate. We combine proven Digital Platform Strategy approaches, with deep expertise in product thinking, platform thinking and modern development best practices to help organizations define a clear platform vision and execute it.

To learn more about the work our teams across the globe do to help build, evolve and extend high-value platforms, visit our website, or talk to us today.

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