



# The digital product journey

## **Authors**

Scott Harper Dixie Adams Jeanette Cajide Christopher Garrick Matt Gierhart There is great
opportunity to grow
your business
through digital
transformation. But
the ability to
understand where
you can and should
go with technology
can be the difference
between leading or
being left behind.

#### THE DIGITAL DIVIDE

In today's volatile and uncertain business landscape, technology has become an integral part of every company's operations – it is essential for staying competitive and meeting customer demands. Companies in every industry are transforming their businesses into digital enterprises in pursuit of tomorrow's brilliant ideas.

To be successful as a digital enterprise, companies must evolve rapidly and constantly to capitalize on new market opportunities. Yet companies struggle with how to deliver on customer demands, especially amid an economic downturn. There is intense pressure, in terms of capital allocation decisions and strategy, to bolster both their bottom lines and corporate reputations. How do companies today close the divide between what customers want and what the business demands?

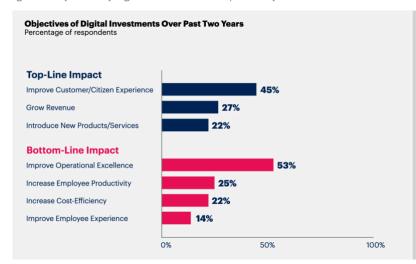


Figure 1. Objectives of digital investments over past two years<sup>1</sup>

There is great opportunity here to disrupt industries and seize market share with a fresh look at what and how you deliver to customers. Customers expect a personalized and integrated experience through simple, intuitive, and trustworthy interfaces – and they want it now.

As the pace of innovation continues to accelerate, what matters most is speed to value.

Companies are looking for a balance between launching at speed ("any thing") and exceeding customer expectations

 $<sup>^{\</sup>rm 1}$  "4 Actions to Ensure Your Tech Investments Pay Digital Dividends," 2023 Gartner CIO and Technology Executive Survey.

# 40%

of total revenue for Global 2000 organizations will be generated by digital products, services, and experiences by 2026<sup>1</sup> ("the perfect thing"). But it's actually about launching the minimum viable product ("good enough thing") and then quickly obtaining feedback for continuous improvement.

Digital product engineering, which involves the use of advanced technologies and software development methodologies to create innovative digital products and services, has emerged as the next way for companies to scale with speed to market. By continuously experimenting with new technologies and iterating on their products, companies can quickly adapt to changing customer needs and preferences – while balancing the needs of the business.

Digital product engineering is how companies can bridge the digital divide.



Downturns can be great times for established companies to make dramatic changes. In late 2007, the 25-year-old company Adobe seemed stuck, with products such as Photoshop and PageMaker stagnating and new software-as-a-service (SaaS) competitors were emerging.

In the face of these challenges, Adobe undertook a bold transformation strategy that focused on engaging and delighting customers. They spent the next two years embracing digital products, including advertising services and analytics, and stopped producing packaged software. This transformation not only sustained the company through difficult times, but it also helped Adobe to improve customer satisfaction and build a new growth business.

60
client net
promoter score<sup>2</sup>



3x

revenue growth from 2009-2019<sup>2</sup>

29%

rise in stock price in one year<sup>2</sup> The objective of digital product transformation is straightforward:
Deliver the best product and experience to your customer as quickly as possible.

## MASTERING DIGITAL TRANSFORMATION

Digital transformation is where you separate your company from the crowd – where you become a true technology company, not just a user of technology. The digital transformation journey is about shifting the enterprise focus to delivering customer value at speed. It is about addressing what the market needs relative to a given product or service, and fulfilling it in an accelerated way that creates a win-win scenario for you and your customers.

Digital products are the ultimate expression of the digital transformation journey. This is not about upgrading existing technology infrastructure or implementing a new digital marketing platform. A digital product is a custom, commercial-grade software or platform that delivers key business outcomes through competitive differentiation and advantage.

Take the example of a car: The digital product is not the car itself; it is the rich, modern experience provided by software such as integrated roadside assistance or automated self-parking. Is it required to make the car function as a mode of transportation? No, it is a tool to enrich and differentiate the customer experience. This then leads to higher customer satisfaction, new streams of recurring revenue and increased market share.

Flexibility and agility are becoming increasingly important as the pace of innovation continues to accelerate.

Large, established companies have the advantage of a loyal customer base, brand, money, scale and data to derive and address customer needs. So why do these companies struggle so much to innovate or bring new digital concepts to market?

While a startup can adapt and adjust very quickly, the impact of every decision can be a matter of survival—funding might depend on it. For an established company, each decision might not be a matter of survival, but decision—making is a more laborious process and reduces speed to market. These companies also face many challenges that a startup does not – legacy systems, technical debt, embedded processes and traditional ways of working and thinking.

## 3x

accelerated time-tomarket for projects embracing cross-functional alignment and cocreation with end users, plus rigorous agile workflows and technical expertise<sup>3</sup> The exponential effect is that established companies face a longer runway to address customer needs and absorb market disruptions.

Companies need to reconsider their old ways of working and embrace an environment of rapid experimentation with minimum viable products (MVPs) that support digital product business models. Throughout this transformation, many questions will arise, such as:

- What does the future of my industry look like?
- Why are we doing this?
- How do I go from where I am today to where I need to be?
- How do I build excellent products that address operational needs of our customers but also deliver valuable business outcomes?
- How can I provide a seamless, delightful experience for my customers and employees?
- How do I change my organization beyond executing an individual product (our culture, ways of working, etc.)?
- How do I address legacy systems and technology that are inhibiting future progress?
- How does it operate within my organization (who should "own" digital product engineering, what role is IT expected to play, etc.)?

On the journey to digital, it is critical to effectively answer these questions and to establish the right operational mindset, strategy and model. Ripping the bandage off and changing everything overnight is not likely to work. Digital product engineering requires a thoughtful transformation from traditional, project-focused ways of working and thinking to an innovative, agile product ethos.

How do companies get started implementing a product ethos at scale and speed? Successful digital transformation must be driven by the following key success factors: Adopt a product mindset

## Define your "why" and communicate it effectively

Companies need to shift their focus from functions and features to meeting a specific customer need. This involves developing a deep understanding of the customer and their pain points and using this insight to guide product development.

Establish cross-functional teams

## Generate buy-in across the organization and product teams

Product engineering requires collaboration between various functions, including product management, design, engineering, quality assurance and data. Companies need to build multi-disciplinary teams that work together throughout the product development process to break down silos and align to the business.

3 Embrace an iterative, agile approach

#### Paint the big picture but demonstrate flexibility

Agile methodologies are designed for product development – enabling teams to work iteratively and deliver products in shorter cycles. Companies need to adopt a product development approach that links strategy to development to performance in a continuous loop that allows them to "fail fast", accelerate product development and improve product quality.

Measure product success

## Establish realistic expectations and define success

Companies need to define product success metrics that align with their business goals and use these metrics to track product performance over time. It requires a shift from project completion as the measure of success toward product value realization as the measure of success.

By adopting a product mindset, establishing crossfunctional teams, embracing an agile approach, and measuring product success, companies can build products that better serve customer needs, improve product quality, and accelerate time to market.

The ability to master the digital transformation enables companies to expand market share, unearth entirely new revenue streams and transform industries.

Bringing a product mindset to the digital product journey allows organizations to build high-quality products and deliver greater value to customers.

Companies that focus on customer experience and co-creation improve relevancy and quality of released products, which leads to:

15%

increase to cash flows<sup>3</sup>

## 1 ADOPT A PRODUCT MINDSET

To transform into a digital products leader, companies need to operate with a true product mindset. What does this mean? Product mindset focuses on addressing customer needs and delivering value in an agile manner. For many companies, this requires a complete change to their ways of thinking.

Figure 2. Key characteristics of project mindset vs. product mindset<sup>2</sup>

Product-led organizations shift from this	To this
Deliver requirements	Solve the customer's needs
Product as cost center	Product as profit/growth center
Specifications and delivery	Missions, experiments, and bets
Build MY solution and prove it works	Explore problem, validate solutions
Handoffs and silos	Cross-functional collaboration
Slower feedback loops/Guessing	Faster feedback loops/Informed decisions
Pageviews and clicks	Experiences, interactions, behaviors

When an organization adopts a product mindset, it's about continually coming back to the "why."

- Why are we doing this?
- Why not do this a different way?
- Why did we choose strategy / feature / interface X?
- Why does our client care?

The why helps companies learn and grow throughout the product development cycle. It also drives continuous feedback loops across the team, leading to better business and customer outcomes.

To master the product mindset, it is imperative to start with your customer in mind.

Focusing on the customer experience is integral to thinking like a digital company and developing digital products that will drive business outcomes. Do your customers want a package tomorrow or in five days? Do they want a product that's easier to use or one that's harder to use? Will they

<sup>&</sup>lt;sup>2</sup> Amplitude's "The North Star Playbook," John Cutler and Jason Scherschligt.

spend more money with a company that makes buying from simple or one that makes it difficult? Customers do not care why you can't deliver what someone else can, nor should they. Ultimately, customers will go to whomever offers them the best value proposition across customer experience, quality and speed.

Remember, it's not about delivering on requirements, it's about delivering products that will delight your customers. And delighting customers is what you need to do to drive adoption, improve client loyalty, drive net new revenue and win in the market.



The transportation and logistics space was facing unprecedented difficulties. Supply chains were breaking down and shippers were struggling. A transportation payment leader saw an opportunity to improve back-office operations for shippers so that they could spend more time meeting customer demands and less time on operations. Putting the customer outcomes at the center of their new product approach, this company seized the opportunity to transform its industry and reposition itself as a financial technology company.

Partnering with a leader in digital product engineering, the company used design thinking workshops, interviews with customers and historical data to identify the right value propositions to focus on. The company designed, built, and launched the logistics industry's premier payment processing mobile application. This app enables brokers and shippers to manage their payments, increase their revenue and retain their top carriers.

3x

faster payments<sup>4</sup>

50%

revenue growth4

Cross-functional, multi-disciplinary teams work together throughout the product development process to break down silos and align to the business.

## **2 ESTABLISH CROSS-FUNCTIONAL TEAMS**

A strong product development team is at the heart of every great product. It takes a well-developed team to deliver their best in a short amount of time – to be more productive, more efficient, and more effective at bringing ideas to life.

To establish powerful teams, leaders at the helm of the company must rethink how they organize and empower teams. IT and business need to walk hand-in-hand with all internal stakeholders to achieve a culture that truly represents a product ethos. These leaders need to understand and promote four core characteristics across the organization and the product teams:

® ®-® Adaptive leadership	Providing empathetic leadership in a dynamic environment where change is inevitable, and teams are enabled to share their ideas, concerns and perspectives
× × ↑     × × ×  Value-stream  oriented	Teams and products are aligned to the customers they serve, and feedback is a critical component of ongoing innovation
Collaborative Quality™	Empower individuals and teams with the skills and tools they need to execute successfully, enable transparency and decision making and understand the context, goals and direction
	Learning is rewarded, mentoring and

Embracing these characteristics, companies begin to establish trust and eliminate barriers between workstreams. Teams are set up for success by leadership and able to focus on growth and collaboration that delivers outcomes for the business

metrics track the work and

Learning-

system

based value

coaching is continuous, and established

accomplishments of the team against the

business, user and modernization goals

# 50%

of executives cite the ability to collaborate in a team environment as a central workforce capability in a post-pandemic world<sup>5</sup>

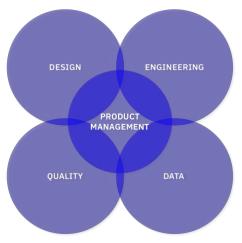
## Product teams that operate in silos run the risk of not delivering valuable outcomes.

A multi-disciplinary, cross-functional team is essential to the product ethos. Successful product teams are a small group of individuals from various disciplines who come together to cover different roles that are required to create digital products. İnstead of each individual's personal skills, their harmony and how they complete each other is important. A product ethos requires every resource to not only be good at what they do, but also to do it in a way that fits into other roles (e.g., how a designer and developer relate).

Product teams that encompass design, engineering, data, quality and product management are better able to ask the hard questions - learning from each and overcoming obstacles. How do you build this team effectively?

- Identify the key roles necessary for a digital organization and then build internal talent.
- Create an environment that makes it possible to test new approaches or technologies quickly and then iteratively make improvements based on customer feedback, all while managing risks.
- Identify gaps that might prevent teams from achieving their digital vision, as well as potential opportunities.

Figure 3. Cross-Functional Team Structure



This team structure brings together different talents and methods that can scale across different product initiatives in a consistent manner. In addition, it breaks down barriers and creates alignment across the organization – from IT and research to executive leaders to sales and marketing to support services.

The alignment of IT and business provides connection across the value, vision, communications, team supports, and governance practices that underpin a healthy program. As teams gain experience, they begin to operate in a unified manner with a shared understanding of the new ways of working to achieve desired outcomes.

When experimentation to innovate and achieve business outcomes becomes engrained across the business and IT functions, your company has evolved into a digital product company.



MoneyGram, a global leader in cross-border money transfers, has reinvented its remittance business into a fast-growing digital payments business. Historically, customers sent money by going into a retail location with cash to pay for an amount to be wired to family or friends at another branch across the world. Back in 2011, 98% of all MoneyGram transactions were done this way.

With the new era of tech-minded customers, MoneyGram application developers worked with the business to launch a strategic digital transformation initiative. The company undertook an incredibly rapid transformation across the business – evolving processes, systems, and mindsets to meet ever-changing consumer demand by creating a digital platform for their customers.

44%

transactions conducted digitally today<sup>6</sup>

1/2

transactions anticipated to be conducted digitally by 2024<sup>6</sup>

The digital journey is supported by a digital product engineering approach to create products that evolve alongside changing customer needs.

## 3 EMBRACE AN ITERATIVE, AGILE APPROACH

There is a great debate raging in the market these days on the "right" way to drive digital product transformation and achieve successful business outcomes. Traditional software development takes a linear or siloed approach to strategy and development – each step is taken in order and aligned to a specific project plan. Performance is an afterthought and typically focused on delivering product requirements on time and on budget. While each of those activities has valuable on its own, together they hold the key to building, launching, and scaling cutting-edge digital solutions.

A sustainable digital product transformation must shift your processes across many elements of solution development to an iterative, agile approach. Digital product engineering is a framework that takes teams through a holistic process of strategy, development, and performance with speed and agility. It integrates the three components to truly embrace change, avoid silos, and create a unique product journey.

Digital product engineering allows organizations to "fail fast" and adjust quickly as market and customer demands evolve.

To differentiate a product in the market, companies must have a firm grasp on customer pain points, the market, and industry trends. Then develop a product that addresses all of that and ties to the company's strategic goals. But it is rare that anyone gets product-market fit right on launch day. The reality is that failure is necessary in order to learn and evolve.

Many successful organizations launched products that failed. Apple had several failed products, Amazon failed to launch successful retail stores and Facebook tried numerous monetization strategies (including micro-gifting) and failed. The reason these organizations are so successful is because they are quick to analyze their failures and course correct at speed.

Like a fingerprint, it is a cohesive and continuous loop unique to the business which leads to an agile process that integrates product strategy, development and performance.

More than half of digital initiatives lag behind CEO/Leadership expectations:

59%

take too long to complete<sup>7</sup>

52%

take too long to realize value<sup>7</sup>

Figure 4. Digital product development follows a continuous loop



## Build the right product

Strategy is critical to identifying how a product will help achieve strategic goals. It is centered around identifying untapped customer needs and market opportunities that can be translated into meaningful products and services.

Digital product companies approach technology as a central part of the business strategy itself, not as an enabler of that strategy. Technology is viewed as integral to the business roadmap.

Product strategy begins with analyzing the market as well as the needs of the user, revealing any hurdles for success to create a vision for the product, and aligning around business objectives. Set realistic expectations by identifying and communicating goals, bets, and initiatives. Through an iterative, co-creation process, the product strategy culminates with clearly defined product objectives and desired outcomes.

# 20%

revenue growth rate premium for those organizations with a higher focus on user-centered design or mastery in their ability to move and exploit data<sup>8</sup>

## Build the product right

Great technology products are the combination of creative design and skillful engineering that take into consideration where your business is today and where it is going tomorrow. Designs must be useful, scalable and aligned with both a company's business and its brand. But they must also be well designed with simple user interfaces.

This is where having a collaborative, multi-functional team that is focused on the customer becomes most critical. Building a digital product is more than writing code, it also requires building the artifacts that will support a successful launch. Remember, it's about delighting customers.

## Make the product successful

Moving from a project approach to a product approach helps align ideas to strategy and prioritize effectively. It focuses on value prioritization – enabling companies to invest in the right bets, prototype, and scale digital products for market fit. Any new investment is driven through strategic planning, connecting IT with the business, which outlines key opportunities across the portfolio.

Utilizing a value prioritization method allows initiatives to be "force ranked" and guides decisions on which initiatives to undertake. These exercises help improve a company's ability to build the right features that drive the expected outcomes and help form high-performing product and project teams.



# 80%

of software products/features are rarely or never used<sup>9</sup>

## 4 MEASURE PRODUCT SUCCESS

Launch day is just the beginning of the product journey. How companies continue to approach nurturing the product, and its ecosystem, dictates its growth and survival. Without a good approach to ongoing product management and datadriven metrics to measure performance continuously, it becomes much harder to keep up with change.

Success is achieved when the product has reached the level of impact that was initially set out to achieve. A data-driven approach is key to determining success – product viability, feasibility and desirability.

For example, if companies have data on how customers actually use their products in the field, the information can help engineers who are attempting to enhance different features. Service requests can likewise provide important information that informs product design.

The success rate of the products is improved by informing decisions with data – enabling quicker iteration cycles and delivering outcomes faster.

Tracking product performance through results and outcomes versus effort and output helps companies recognize the true value being delivered. It also provides visibility and opportunity to further evolve the next generation of a successful digital product – continuing the loop between product strategy, development, and performance.

## Leading the way with customer experience

Domino's has always been a leader in innovation, from inventing the 3D car-top sign to insulated bags that keep food hot during delivery. That creativity has helped Domino's successfully transform into a digital innovator and market leader in the restaurant industry. From reinventing their website to the launch of its innovative Domino's Tracker and Pizza Builder tools, Domino's Pizza has created a personalized buying experience for their consumers and built customer loyalty.

To achieve its "digital everywhere" strategy, the company embraced a product mindset and dedicated resources to building and promoting digital platforms. Large development efforts gave way to small, project-focused groups. Good ideas were quickly prototyped and tested in small markets, where failure wouldn't be a black eye. This fail fast approach, combined with continuous customer feedback, allows Domino's to be agile in identifying ways to improve the customer experience.

12

digital ways to order using device of choice<sup>10</sup>

80%

of sales generated via digital ordering channels<sup>10</sup> 50x

growth in share price over the past eight years<sup>10</sup> To thrive in the digital world, companies must ensure that their ability aligns with their ambitions.

#### THE JOURNEY BEGINS HERE

Before pursuing digital opportunities, leaders must first develop and align on a digital vision for their organization, looking at both the overall digital strategy and value proposition for their companies. It's important when executing on digital products to zoom out before you zoom in – look at this through the context of the enterprise. Return to those questions that you asked at the beginning of the transformation:

- Why are we embarking on this journey?
- Who should own digital product engineering, what role IT is expected to play, etc.?
- What needs to change with our culture, ways of working, etc.?
- How do I address legacy systems and technology that are inhibiting future progress?

Ultimately, companies want to sell the entire product development vision; you won't get the buy in or be able to execute successfully if you don't create the full picture. Teams should know what the next five, 10 or more steps are to achieve the desired success. However, organizations must also set clear boundaries; not everything is a product and not every product is a viable opportunity in the market. Remember, not every company is Google, so trying to superimpose their model on your company is not going to work.

Once a company decides to implement new digital products, a capability-driven approach to product transformation helps connect the "why" to the "what" and the "how". Companies should begin by assessing existing capabilities, estimating the resources required, and contemplating potential partnerships that could help them achieve their goals.

Success is an ongoing evaluation of the ability to quickly deliver features in small-batch increments, then learn and react to drive continuous value.

This is where the concept of "start small" comes into play. Look at the big picture and identify one really great example of what you think good looks like. What can you develop and bring to market now that meets a customer need? Identify "Companies doing it right today realize that technology is a value driver—the primary way they are going to do business now and in the future."

> – Scott Harper, CEO of Dialexa, an IBM Company

key areas that can be accelerated and delivered earlier. Build that and then grow and scale from there.

Delivering product excellence at scale requires institutionalized technical excellence (standards, quality, security) to make this journey successful. If you do not have the right domain experience and technical expertise, consider engaging a partner for digital product engineering services. A strong partner can:

- Drive alignment between the goals of the business and the technology capabilities.
- Identify opportunities that solve unmet, underserved needs.
- Accelerate ideation to determine the best product opportunities.
- Evaluate new, emerging technologies to improve
- Define the architecture to accelerate scalable, secure
- Identify the gaps and develop a roadmap to get you there.
- Design, build and launch successfully commercialized technology products and/or help you to do so.
- Deploy a dedicated, multi-disciplinary team that continuously analyzes performance against business objectives.
- Innovate continuously in a way optimized for cost in a scalable, secure environment.

Whatever path you choose, the desired result can be achieved: sustainable business transformation.

## The digital advantage at NIKE, INC.

Long a pioneer in the retail sector, Nike has relied heavily on wholesale and retail storefronts to drive revenue and brand loyalty. But over the past decade, Nike has embraced cutting-edge technology combined with a direct-to-consumer strategy. Nike believes the future hinges on what it calls *Digital Advantage*—technology-fueled growth that drives "greater competitive separation."

Nike's digital transformation playbook works. Nike has made a number of savvy digital investments including the launch of its mobile apps including NIKE mobile app, the SNKRS mobile app, the NTC (Nike Training Club) and NRC (Nike Run Club). They have also embraced new platforms, such as the metaverse, with great success. Today, Nike forecasts that by 2025 over 50% of its sales will be direct-to-consumer. Their successful tech investments elevate customer experience, distance competitors, and reward investors.

84%

of sales were to wholesale customers in 2011<sup>11</sup> 1/3+

of annual sales from direct digital and retail in 2022<sup>12</sup>

#### **ABOUT THE AUTHORS**



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Scott believes in building a better world through technology innovation. He specializes in strategy, ideation, design, user experience, architecture, development and building amazing teams. Scott brings a strong product discipline, proven track-record for client delivery, and mindset of innovation and collaboration to drive digital transformation for enterprises across all industry sectors.



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Matt is focused on helping clients identify and implement new innovations and products. As a thought leader, he works across geographies and sectors to apply new uses of technology and digital business models. Matt's key skill is turning visions, new offerings, and innovations into actual projects with measurable benefits for the client and local teams.



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Jeanette wades into complex business settings and creates clarity and insight. Her ability to think strategically across both business and technology is supported by her drive to roll up her sleeves and do the work. Jeanette focuses on creating new digital products and innovative service offerings that lead to growth and revenue for clients.

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