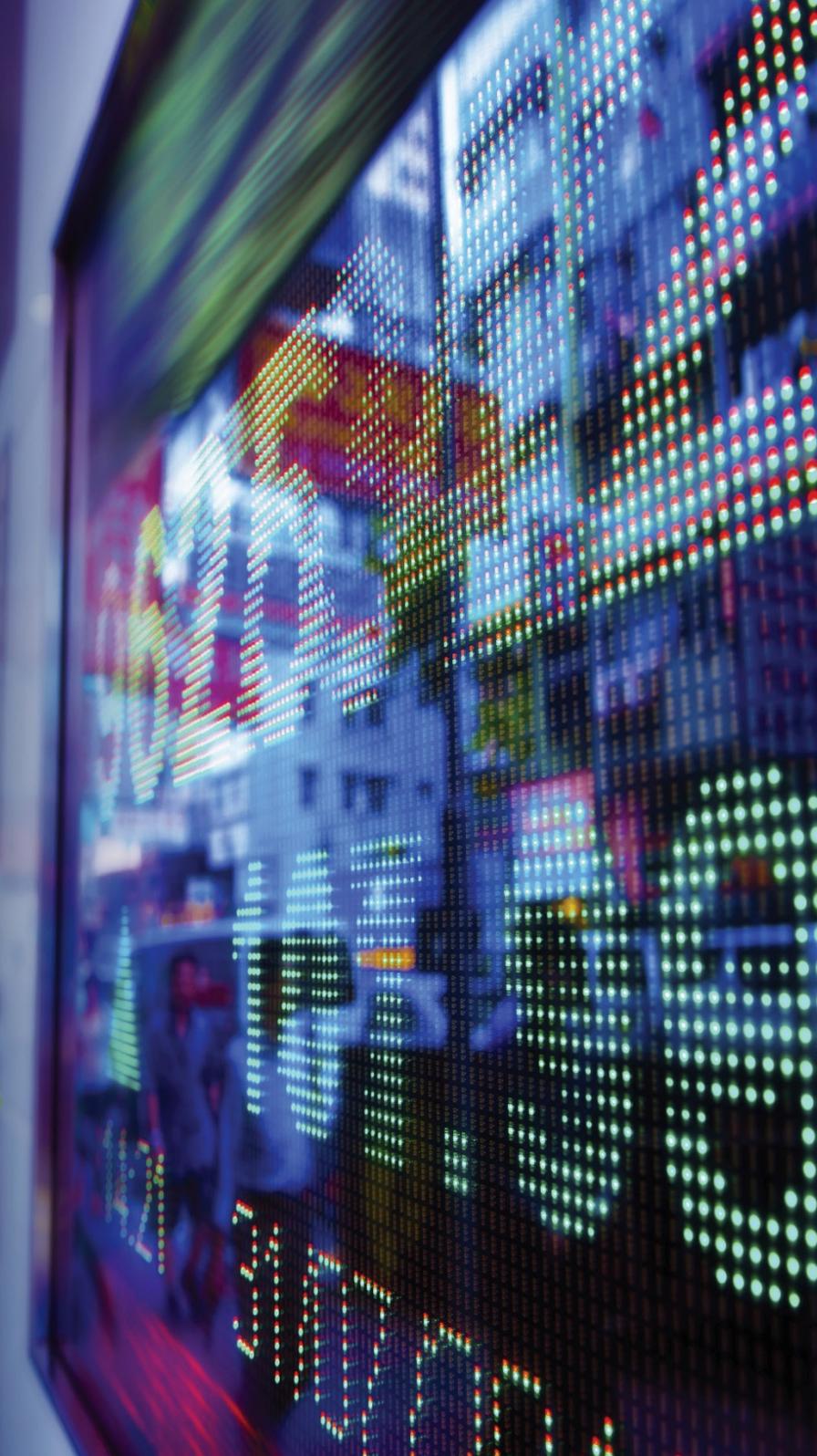




Funding technology at market speed

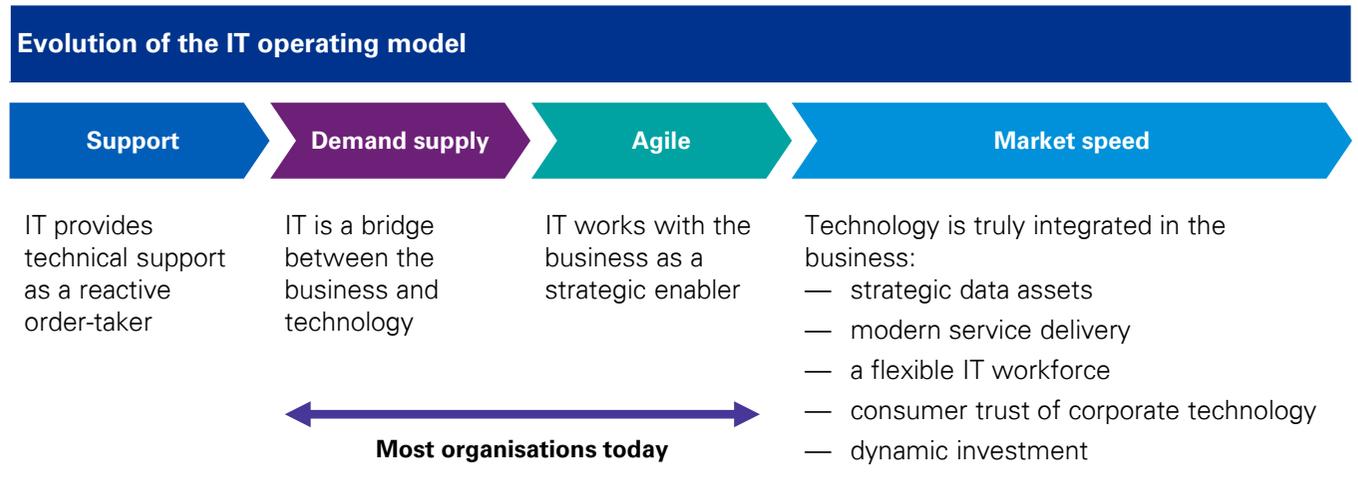
The need for dynamic investment in the future of IT

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To meet the technology needs of the enterprise, IT operating models have evolved over the years from reactive support centers to supply-and-demand models and, most recently, to “agile” methodologies. But now, as the pace of change seems faster than ever, many companies are finding their agile pace isn’t quite agile enough.

To truly operate at market speed, companies must continually build, buy and integrate technology - even before the destination is fully understood - while keeping an ever-watchful eye on the future. Indeed, when disruption is the status quo, with new competitors suddenly breaking into markets and stealing share, simply reacting to change is not an effective business plan.



Moving at market speed is the IT operating model of the future. And just as development must get faster, nimbler and smarter, so must the funding process that enables it.

That is, companies can have the most agile capabilities for developing technology, but if they need upwards of a year to get resources for an idea, they will still fall behind. To become the disruptor instead of getting disrupted, companies must embrace a process of dynamic investment.

A new approach to funding innovation

In a 2018 study of more than 270 global companies, conducted by Innovation Leader and sponsored by KPMG in the US, nearly 42 percent of respondents said that an obstacle to innovation is the inability to act on signals critical to the future of the business¹.

That inability is often because the traditional approach to funding technology simply doesn't support fast pivots in the digital world. Indeed, budgeting for capital investments is typically an annual process, including heavy governance and controls to reduce cost and risk. Today's long-lead process, rooted in prudent stewardship of enterprise capital to prevent bad things from happening, often caters to the lowest common denominator and simply doesn't allow the business to capitalize on innovation opportunities as they arise.

As a result, IT may see finance as a gatekeeper, while the business sees IT as slow, reactive and expensive. In frustration, companies may try to accelerate technology development, only to end up with short-term trade-offs that increase technical debt instead of innovation.

That's why the market speed model of the future needs a market-speed approach to technology funding, called dynamic investment. In this new model, the funding process is continual, not annual. It's also flexible, enabling the enterprise to constantly shift its capital among various technology bets, putting some chips on the table and taking other ones off - with a willingness to experiment, fail fast and redeploy capital as needed.

How can your organization pursue dynamic investment? It requires a new mindset and approach - among finance, IT and other business functions involved in the launch of technology. The following are five key considerations:

- 1. Fund value instead of projects, and think like a venture capitalist**
- 2. Adopt lean funding to keep the technology portfolio current**
- 3. Embrace the decentralization of IT**
- 4. Catch bad ideas faster**
- 5. Communicate transparency and value**

¹ Benchmarking Innovation Impact 2018 (Innovation Leader LLC & KPMG in the US, 2018)



1. Fund value instead of projects, and think like a venture capitalist

Instead of seeing technology spending as a project, companies should see it as an investment in strategic value.

Companies should start with their business' value chain, and then align how technology enables it. For example, if an auto manufacturer has a strategy around connected vehicles, a value-focused investment might be technology that enables drivers to interact with their cars in new ways. Or, if a hospital has a strategic priority to improve the patient experience, a value-focused IT investment could be funding the cross-functional roles required to enable all aspects of that experience in the value chain. For example, if the hypothesis is that tired nurses and doctors spend a lot of time entering information into systems that are supposed to automate their life, then organize a team inclusive of people with skills in clinical, development, infrastructure, testing, security and compliance, who can completely deliver value for one segment of the value chain, such as the emergency room, including triage, waiting room, consultation and exam.

With such a lens of strategic value, companies will create business cases that focus on products, not projects (see Figure 1). And in dynamic investment, the funding control for these technologies will be in the hands of product owners - not various back-office functions - and it will not be subject to an annual budgeting cycle. Rather, product owners will work with finance to quickly secure small amounts of capital and achieve quick wins or failures.

In other words, companies should approach their technology investments like venture-capital (VC) firms: continually evaluating bold new ideas that challenge the status quo - and being ready and willing to invest in ideas that make financial sense, even if they're not in the capital plan.

Vcs know that in order to find the next Slack or Tencent, they must take calculated risks as they arise and place many small bets across a diverse portfolio, keeping in mind that some will succeed and some will fail. Vcs recognize that if they wait for each startup to turn a profit before they invest, they will miss the boat, and they also know when to pull money off the table on a losing idea.

Acting as internal consultants, product managers drive and are held accountable for designing, delivering, and deploying people, process, policy, and technology changes required to drive sustainable innovations for the business.

Figure 1. A new mindset: from projects to products

Scenario: new functionality for a mobile app

Project mind-set	
Initiation:	Impacts:
<p>Three separate projects are initiated by project managers representing their respective business groups:</p> <ul style="list-style-type: none"> — One business group decides to rework the login screen — Another group decides to introduce freemium — A third group decides to reduce functionality due to unforeseen cost 	<ul style="list-style-type: none"> — New functionality is deployed on time by all three teams, but on different deployment schedules without awareness by other functions, such as marketing, operations and customer care — Customers update the app but are confused about the changes and missing functionality; they become more frustrated when they call for support, leading to negative reviews — Development teams don't understand why the app reviews are negative when they delivered functionality on time and on budget — Business groups continue to drive goals within their respective silos
Product mind-set	
Initiation:	Impacts:
<ul style="list-style-type: none"> — At a product meeting, decisions are made to introduce a freemium model to acquire more users, simplify the login process and limit high-cost functionality to paying customers — One cross-functional team, led by a product owner, sequences the changes based on input from other business functions 	<ul style="list-style-type: none"> — New functionality is deployed when the business is ready, with launch timing approved by the product owner — The product owner closely monitors the deployment, tracks adoption and watches for unintended outcomes — Customers love the app; the product achieves its objectives; the cross-functional team celebrates its success

2. Adopt lean funding to keep the technology portfolio current

To move away from annual capital planning for technology, your organization should find a way to fund technology before all of the details are fully understood. Therefore, it's time to revisit the traditional governance policies for enterprise capital - related to finance and accounting, risk, legal, procurement and other areas - which can stand in the way of innovation at market speed.

How can the finance organization release capital for new products focused on strategic value, allowing technology teams to learn fast or fail fast, with transparency for tracking product performance? Enter lean funding: an efficient way to help launch technology investments.

In traditional budget cycles, the business approves and prioritizes technology projects, funds them and sends them to IT to execute. In lean funding, on the other hand, the funding is linked not to project approval but rather to multi-year IT teams who have broad license to experiment with technology. In other words, instead of identifying specific projects for IT to execute, the business can identify strategic priorities that need the help of technology - and provide IT teams with sufficient funding to explore them.

Have an enterprise strategy for improving customer experience? Maybe you fund a cross-functional IT team that is empowered to make CX better through technology. This team should also be empowered to start on projects before all requirements are defined, while using simple objectives and key results (OKRs) to continually measure success or failure. Similarly, some leading IT organizations are setting consensus-building stage gates related to minimum viable products and minimal marketable products.

Moreover, in lean funding, there is an understanding throughout the business that many projects will fail, and there is a willingness to discontinue those that aren't working, so funds can be reallocated quickly to other initiatives. In addition, funding is not locked up in initiatives slated for future quarters; it instead is flexible across the portfolio.

In one leading energy company, for example, finance streamlined its controls process by approving an annual pool of lean funding to be used at the CIO's discretion for new technology ideas. For this "innovation budget," there were no strings attached, no expectations for a certain level of return, and no additional approvals required. Instead, the CIO had permission to make diverse bets, quickly and safely as opportunities arose. And as a result, the small investments from this pool of funding generated

higher ROI than other technology initiatives in the mix.

As an early adopter, Cisco IT has been applying business data to transform IT services strategy and delivery, garnering the support of C-suite executives and inspiring supply chain and HR teams to follow a new model for understanding costs holistically. Today, Cisco IT provides a mature framework for enabling new business capabilities, delivering IT value with speed, and empowering decision-making beyond the IT organization. "We have to be the general managers of our service, and I have to be able to articulate to our CEO, CFO, and COO the speed and value that IT brings to our digital transformation. I call that velocity to value." Guillermo Diaz, CIO.²

² Velocity to Value: A Cisco Systems case study (TBM Council, 2017)

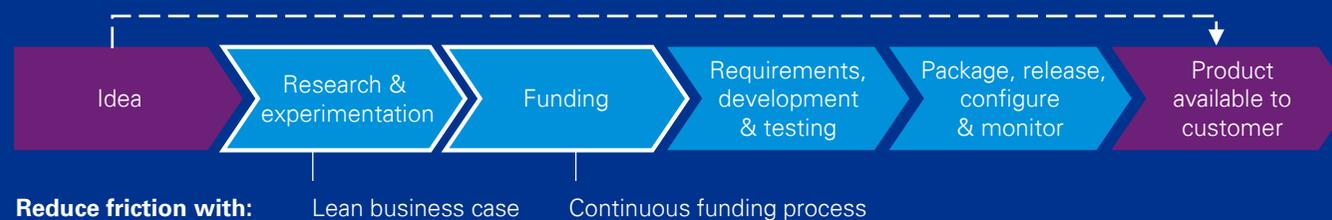
3. Embrace the decentralization of IT

Gone are the days of a centralized function that controls enterprise technology, as business units can now get their own technology solutions by going directly to the cloud, platform providers and managed services providers. But these business units should nonetheless work closely with finance and IT to remove friction and achieve market speed.

In an environment of dynamic investment, the multiple parties involved - including the product owners, finance, IT and supporting functions such as vendor management and operations - have an opportunity to “shift left” and become aligned as they contemplate a business case for funding (see Figure 2). These teams must understand the OKRs for a product in the context of strategic value for the enterprise, along with the technological solutions for achieving them.

Moreover, to move at market speed, product owners cannot wait until budget time to present ideas for the year. These product owners must continually contemplate technology to drive the enterprise strategy and take ideas to the investment committee - no less frequently than quarterly - while exploring ways to do them faster, smarter and cheaper.

Figure 2. Fund IT like a VC



IT funding today:

- A business case is prepared with a cost-benefit analysis
- Scope, timeframe and resources must be known upfront and are evaluated annually for project prioritization
- Measurement of success is based on lagging indicators, which often cannot be tracked at the speed of agile delivery

IT funding of the future:

- Business cases have permission to fail fast, and funding is not tied to an annual planning process
- Technology teams are organized around strategic value, and resources are funded for multiple years to pursue strategic objectives
- Funding is focused on products, not projects
- Measurement of success is based on leading indicators
- Companies recognize that the process can be successful even if a particular investment is unsuccessful

4. Catch bad ideas faster

Dynamic investment should enable an organization to make smarter, faster decisions, which may include doubling-down on investments that are working or cutting those that are not. This ability requires a new approach to evaluating success. Consider these three areas of opportunity:

Determine the right leading indicators

Unlike an annual budgeting process that sets forth clear expectations for investments, a dynamic funding process is based on clear hypotheses - with the ability to test, learn and iterate. In fact, according to the 2018 study by Innovation Leader and KPMG in the US, this ability is second only to leadership support as the factor that most enables innovation success.³

When the business case is based on a hypothesis, traditional lagging indicators such as revenue, ROI or market share may not be relevant, because innovation may not generate these kinds of results right away. Moreover, strategic value doesn't always come in the form of easily quantifiable objective results; it may come in more subjective outcomes such as enterprise agility or flexibility.

A better approach, consistent with lean funding, is to make sure your OKRs include leading indicators that confirm whether an investment is on the right track, and these indicators should go beyond traditional factors like scope, schedule and budget. How are customers responding to the technology? What is the willingness to pay? What is the rate of adoption? It's important to agree to these kinds of leading indicators early, before work begins, and assess them throughout the investment.

For example, as consumers increasingly use mobile phones to order rides rather than driving their own cars, some carmakers are experimenting with mobility services related to ride hailing and car sharing.⁴ Investment in these kinds of services will require all-new performance metrics for growth, profitability and sustainability. Instead of traditional measures such as the number of units manufactured, gross margin percent and market share, companies will track indicators such as the number of active customers, cost per available seat mile and levels of churn.

³ Benchmarking Innovation Impact 2018 (Innovation Leader LLC & KPMG in the US, 2018)

⁴ The clockspeed dilemma of the automotive CFO (KPMG in the US, 2017)

Change the way your organization views failure

Moving at market speed means changing the belief that “failure is not an option.” Organizations with this legacy mindset go to great lengths to prevent failure related to scope, schedule or budget, and when it does happen, the failure is usually declared too late to salvage the lost time, capital and employee morale.

In a culture of dynamic investment, on the other hand, leaders position failure as a completely acceptable option, because as long as there is a strong customer-feedback loop and focus on continuous improvement, success and failure are both valuable outcomes when approached in the right context. Indeed, in the process of developing the modern lightbulb, Thomas Edison famously said, “I have not failed. I have just found 10,000 ways that won't work.”

The CIOs of the future will recognize that stopping work on a technology initiative can be a good thing - and is not a failure unless the organization takes too long to do it. For example, one way to shock the cultural mindset is to have executives promote failure. At an industrial distribution company the CTO encouraged the reporting of failure by hosting a pizza party for those teams with the most failures. Stopping work and having a pizza party was far less costly than waiting three more months while failures got worse.

Enable anyone to call out a failure

Changing the culture also means empowering employees to draw attention to problems. One historical example comes from Toyota, which installed the Andon Cord on its assembly line.⁵ If workers spotted a problem on the line, they could pull the cord, at which point work would stop and a team would swarm the problem to fix it immediately.

Similarly, agile software development teams often use the “fist of five” technique to assess whether team members have concerns about a project. During a meeting, team members can indicate their level of confidence by holding up a hand, ranging from a closed fist (no confidence) to all five fingers (total confidence). Any team member who holds up fewer than three fingers has an opportunity to discuss his or her concerns.

Consider whether your culture includes these kinds of techniques, encouraging workers to call out failures and escalate them for review.

⁵ "Individual Involvement and Intervention in Quality Improvement Programmes: Using the Andon System," by Robert J. Everett & Amrik S. Sohal (International Journal of Quality & Reliability Management, 1991, Volume 8, Issue 2)



5. Communicate transparency and value

Is a technology bet paying off? Should the company invest, divest or change course? To effectively discuss the benefits of an investment and shape the technology portfolio accordingly, IT must use the language of the business to report on cost, performance and other indicators. That means linking technology to business objectives and making those linkages transparent - inside and outside of the IT organization.

One of the leading methodologies for understanding value and communicating it effectively to the business is Technology Business Management (TBM)⁶. This discipline stitches together disparate financial and operational data into a meaningful value story, and it includes a standard taxonomy for improving insights into metrics.

With TBM, IT organizations can better plan for the future, encourage new ideas and articulate the benefits of them. Technology leaders can go from reactively managing cost to predicting outcomes, based on data and analytics, while enabling faster, more informed decisions.

For example, SunTrust Bank uses TBM as a foundational element to align IT to products and services and to help penetrate the digital ecosystems where clients interact with financial services. The IT team has leveraged cost transparency to shift run-the-bank spend to change-the-business investment. This changes the dialogue with the business and secures executive level buy-in. Today, executives use TBM data to make strategic business decisions, fund next generation technology strategies, and partner with the business to optimize spend. This has resulted in a 16% operating expense reduction through application retirement and over 500 server decommissions and migrations.⁷

Providing transparency isn't just about identifying cost-cutting measures. It's about using technology to enable the business. Just as IT and finance need to catch bad ideas faster and redeploy resources, a market-speed organization needs transparency to do the same.

⁶ <https://www.tbmcouncil.org/>

⁷ TBM Council Awards 2017: TBM Delivers a Common Language for IT, Finance, and the Business at SunTrust Bank (TBM Council, 2017)

Are you ready for market speed?

The ability to reach market speed across the enterprise will depend largely on the company's ability to trade monolithic budgeting processes for dynamic investment, redesign governance and controls, and create transparency on cost and performance based on new metrics.

To get started, look for ways to bring a venture-capital mindset to your technology portfolio. Finance, IT and the business will need to work together to pursue lean funding, focus on products that drive strategic value, measure and communicate the right indicators of success, and revisit the way the company looks at failure. With these strides, you will be on your way to dynamic investment, so your company can create better technologies faster - and truly move at market speed.

Why KPMG?

KPMG member firms recognize that CIOs and IT leaders face increasingly complex demands and challenges. Today, IT must advance the business, not just support it, with boards increasingly expecting returns on digital investments and the implementation of successful digital transformation strategies that will drive up agility, responsiveness and enhance the customer experience.

KPMG professionals can help CIOs, technology leaders and business executives to harness new technology and improve the strategic value of their technology investments. If your business is seeking ways to leverage technology as a source of innovation and competitive growth, KPMG member firms can help.

Related reading

This paper is part of KPMG's Future of IT series, exploring the six most important things that market leaders will do in IT over the next five years. For more on the Future of IT and to read other papers in the series, please visit kpmg.com/Future-IT.



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