

PIVOT TO VALUE WITH LIVING SYSTEMS



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A gap between investment and value

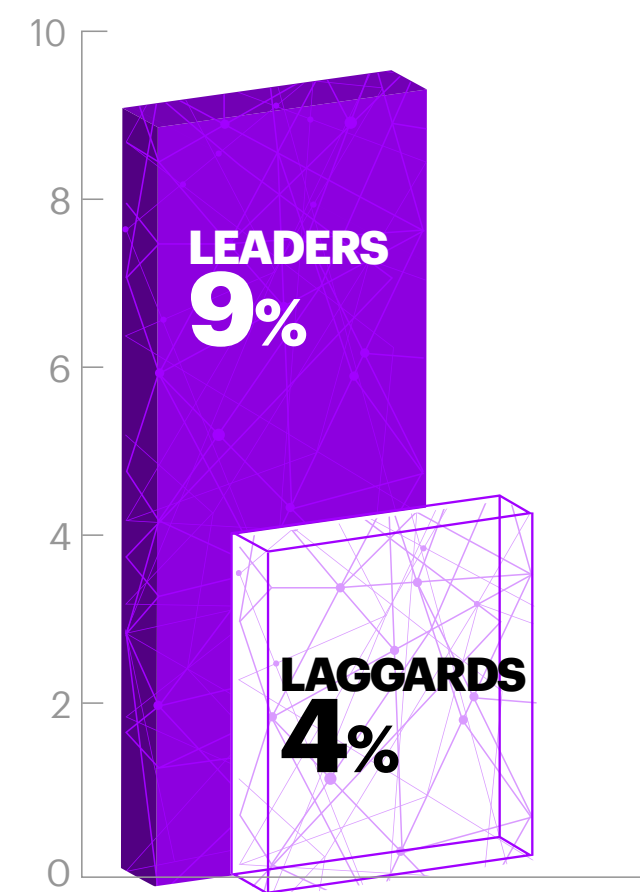
Technology is everywhere, but value is not. That's what companies across industries have discovered as they've invested in new technologies. They just aren't getting the return on investment they expected. Why?

What we're seeing in our research is that today's C-suite is making significant investments in new technologies. However, they're deploying technologies in pockets, or silos, of their organizations without effectively scaling them across the enterprise to realize the full benefits. Even before COVID-19, most companies struggled to harness technology for business change, according to Accenture's Future Systems research.¹ Now, the gap between leaders (the top 10% companies) and laggards has widened.

Leaders are doubling down on their technology investments. And laggards recognize they urgently need to accelerate their digital transformations. Leaders are innovating at scale with technology thereby achieving significantly more value from enterprise systems and seeing more than twice the revenue growth of others. And they lead the pack in customer centricity, profitability and agility. Laggards are more likely to face growth stagnation and financial constraints, as well as be more vulnerable to industry disruption.

Lagging the field has consequences— now more than ever

Revenue growth



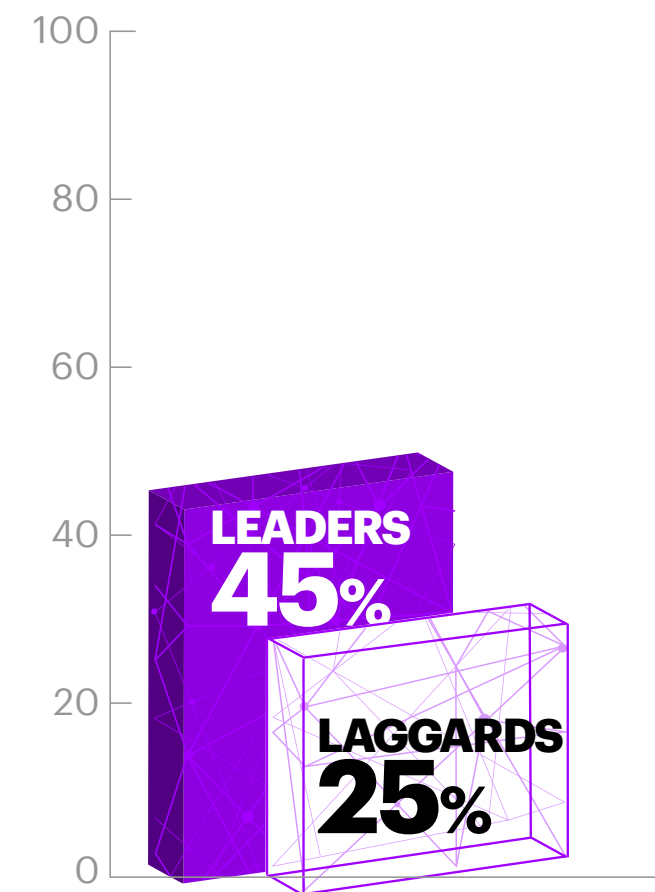
Leaders who innovate at scale grow at a rate of 2x greater than Laggards who innovate in silos.

Customer lifetime value



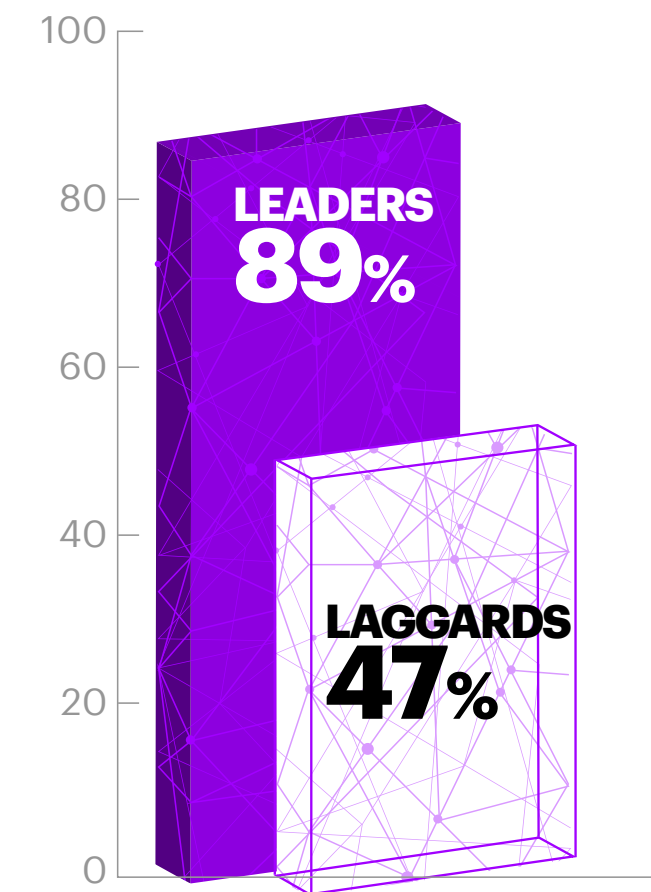
Leaders have experienced increased customer lifetime value through investments in innovation as compared to Laggards.

Operating margin



Leaders are ahead in using innovation investments to improve operating margins.

Agile culture



Leaders break down cultural barriers by having IT and non-IT talent work together, compared to Laggards.

[Accenture Future Systems Research](#)

Business and technology at a crossroads

As the pace of change has accelerated so has the need to quickly embrace new technology.

Companies that can release new technology capabilities faster than their competitors are at a distinct advantage. As a result, businesses have taken innovation into their own hands, such as directly experimenting with new technologies and cloud services in “pockets” instead of across the whole company.

Consequently, business leaders other than the CIO are becoming “evangelists of the new.” In fact, IDC estimates that nearly 50% of IT investment comes from non-IT sources.² Meanwhile, IT teams are often boxed in as custodians of traditional enterprise technologies, data center services and end-user support,

which for many organizations are still time-consuming activities. And with siloed annual budget processes, the result is a splintering of strategic programs.

What’s more, investment decisions are not tightly integrated with business priorities, and most companies have no easy way to measure the return on investment. While many have dabbled in agile practices, most haven’t embraced lean principles at scale, limiting their ability to experiment and innovate. And with low automation adoption, companies are unable to pivot their business in new directions at speed.

All these challenges contribute to what we call the *innovation achievement gap*—the difference between potential and realized value from technology investments. Simply investing more in technology won't necessarily deliver the business flexibility that organizations need. In fact, companies are spending more on technology but seeing proportionately less in return. Those companies that were categorized as "laggards" in our Future Systems research had 15% in foregone annual revenue in 2018, and this gap was expected to grow exponentially.³

What should companies do instead? They need a fundamentally different approach to building and managing technology—one better suited to the ever-changing reality of today's business landscape. We call this new approach "Living Systems," because it's not static; it's continuously evolving capabilities and skills in a world of constant change.

Living Systems is an approach to harness new technologies and innovation at scale across the organization to better achieve business outcomes.

Living Systems: A pathway to putting technology innovation at the heart of every company

Living Systems is an innovation multiplier that creates value by moving several different levers of change, including strategy, organization, technology and talent, in an agile way.

Meanwhile, Living Systems can drive efficiency, free up capital and shift the majority of spending to innovation for new products and services.

When you start with a Living Systems approach, you experience incremental innovation in your organization, and the more you apply the Living Systems approach, the innovation effect is multiplied to deliver a comprehensive business impact.

To enable this continuous value creation Living Systems help companies reimagine their business growth strategy powered by technology; realign their organization so technology is at the heart of every business; adopt new practices for agility and experimentation; create a flexible technology core for sustainable change; and empower people to innovate with technology.

Pivot to agility with Living Systems

Back in 2016, a technology industry giant reached a crossroads. Its IT function had devolved into a confederacy of organizations. Business owners had little transparency or shared expectations with IT. With systems burdened by decades of legacy code and no strategy to reduce technical debt, the company was spending 80% of its IT budget on fixing its past and only 20% on innovating for the future.

Fast forward to 2020. The company spends just 40% of its IT budget on fixed IT costs, with 60% invested in innovation. And it has cut 83% from the time it takes to bring new features to market.

What's more, when COVID-19 hit, the company was well positioned to navigate the crisis and emerge even stronger.

So, how did it achieve all this?

Through a reinvention designed to outpace the speed and innovation of the company's digital-native competitors. The company shifted to a modern engineering model in which business experts and full-stack engineers work in integrated teams with agile development practices. It migrated 100% of its IT estate to the cloud. And it adopted automation for a more productive workforce and AI for data-driven business decision-making. Most importantly, all this was achieved without the need for additional investment—through a self-funded model.

Like most organizations, the company used to spend most of its IT budget “keeping the lights on.” Its multi-year reinvention changed all that, flipping the IT investment curve and steadily freeing up capital to reinvest in innovation. The company has now joined the 10% of leaders that can innovate at scale, growing revenue at twice the rate of organizations that continue to innovate in silos, according to Accenture research.

This pivot to innovation is a pivot to Living Systems, which delivers the agility companies need to stay out in front.



01 Reimagine a growth strategy powered by technology

Organizations that want to unlock the full value of technology need a growth strategy that is unified across business and technology.

The focus is on exploring how technology can make the business strategy a reality and identifying greenfield opportunities in products, services and competitive positions. This requires a strategic mindset to help transform the legacy business while positioning for future growth.

A seamless strategy guides the organization towards value and stakeholder return.

As our Future Systems research shows, leaders have a clear vision and take a deliberate stance toward technology adoption. Instead of acquiring new technology for one-time projects, leaders fund persistent value streams measured by business outcomes.

When companies improve the interaction processes and governance between the business and IT and build a more agile operating model, they see technology-driven business growth and transformation.

For example, organizations must redesign the funding model to empower experimentation and continuous innovation across the organization, where the complete value of initiatives might not be certain upfront. They need to keep capturing value as the organization adapts to changing competitive conditions.

And to maximize return on investment, especially beneficial in a capital constrained environment, they need to create mechanisms to self-fund transformations and redirect investments to higher value activities.

Driving a customer-centric culture

A telecoms company's IT function took up the challenge to improve customer experience and enhance overall business agility. With a data-driven operating model where business and IT are aligned to deliver outcomes and talent is transformed to be service-led, the company has achieved a 25% reduction in cost of ownership, a 50% improvement in time to market and 80% of IT employees have been redirected to strategic projects.



02 Realign the organization to put technology at the heart of every business

Today's IT departments are usually organized horizontally, in technology and functional teams.

And performance is measured through traditional IT service level agreements (SLAs), primarily based on the speed of response and resolution of requests. IT is in effect structured to deliver for IT—that is, services that are measured by IT SLAs.

The SLA then supersedes what’s important to the business (such as disruption in a business process caused by an IT failure). This often creates the “watermelon effect”: green on the outside (IT SLAs are all green, or satisfactory) and red on the inside (business user dissatisfaction from impacted processes).

By restructuring to vertical teams that are aligned by business processes (also called “product aligned”), IT services focus on business value and are measured by business KPIs. These integrated “product teams” are self-sufficient, with alignment of all required IT capabilities to run the systems that support the business and deliver new capabilities at the speed required by the business. What was once a series of disconnected efforts deviating from business objectives and driven by subjective priorities is now unified under a common vision with clear prioritization and full transparency.

With true business-IT alignment, organizations change the model, so their IT service delivery breaks down functional barriers, improving collaboration and creativity—whether that’s delivering the product to the end customer or meeting a production output. Through advanced automation techniques and technology, siloed applications and infrastructure support services that were once separate teams can become integrated services.

Enabling technology and business capability alignment

The company focused its IT and business strategies on shared goals and solving business problems. The IT workforce was reorganized into squads assigned to business areas. As a result, speed of innovation improved dramatically: 50% of programs that went live quarterly moved to weekly; incidents decreased by 30% in the same period. Headcount was also reduced by 40% through more efficient operations.



03 Adopt new practices for agility and experimentation

Companies should take steps to make sure the cycle of innovation is continuous through modern engineering capabilities.

This approach is a transition from the typical software development life cycle that used to take 18-24 months to one that employs design thinking capabilities to co-create solutions with the business and quickly delivers a minimum viable product (MVP). To do this, companies need a continuous innovation framework that is MVP-driven with a “build, measure and learn” approach informed by customer and data insights. Automation, cloud and platform-as-a-service capabilities are critical enablers to rapid, continuous and simultaneous development.

Embracing automation becomes especially critical as customer expectations and the pace of change increase. The market won't tolerate slow engineering delivery cycles, rigid schedules and fragmented, error-prone and time-consuming manual activities.

Finally, MVP-driven continuous innovation benefits from the transition to a vertically aligned organization. Once achieved, it can result in more than 20 MVP projects simultaneously delivering at speed.

These pivots are underpinned by modern operations that shift traditional IT operations from a reactive "fix-on-fail" model to a predictive, preventive one. Through AI-based correlation of IT events an integrated command center looks for patterns that are causing events instead of separately managing and resolving issues.

Without human intervention, this self-healing system fixes the root cause of the integrated system's problem, predicts when issues might arise and proactively "fixes" them before an incident occurs.

Not only does the IT team dramatically improve service quality, it also reduces the costs of "lights on" IT operations. This contributes to more value-added technology investments with much higher and more relevant ROI for the business. Using technology like hyper-automation and machine learning, connected applications then provide the technological foundation for new kinds of business, partners and customer interactions.

Reimagining guest experiences with agility

A large cruise company's Living Systems integration approach—including testing, performance and engineering—enabled the rapid release of new features for their digital guest experience platform in 10-12 days and helped drive a 95% reduction in boarding wait time from 10 minutes to just 30 seconds.



04 Create a flexible technology core for sustainable change

Provides a secure cloud architecture that is resilient and adaptive to accelerate innovation, data-driven analytics, sustainability and business value.

A flexible technology core is foundational to Living Systems. To start, organizations should assess their existing enterprise architecture and develop a roadmap to decouple their application portfolio, determine their target objectives and migrate legacy systems to the cloud.

Cloud computing is a springboard to achieve more value from other technologies, such as AI and analytics. To yield the most benefit from analytics, companies need a robust data backbone, capable of ingesting, structuring and processing data from multiple sources.

Companies must accelerate to the cloud securely; they need to analyze their current security architecture and make sure there are effective controls and monitoring. With a hardened security approach, real-time data quality is always improving, and the cloud reinforces business resilience.

A modern technology foundation might seem to resemble a collection of smaller systems and services; binding these together is what drives differentiation, resilience, speed-to-market and agility.

During the recent pandemic, many companies needed to shift how they operate, scale their ecommerce capabilities and provide highly personalized services to customers. Companies that were already leveraging the cloud and building agility in their systems and processes were ready. They were able to respond to the rapidly changing business challenges they faced, better than those with inflexible, fragmented systems and less insight into their customers' needs.

Optimizing agility and resilience

Enel, a leading European utility, was looking to reinvent itself in the cloud. Using cost savings enabled by their migration to cloud starting in 2015, they have transformed their business. Today, ENEL enjoys reduced go-to-market times, optimized cost efficiency and greater business agility through use of public cloud. In addition, the cloud enabled its more than 37,000 employees to work remotely, allowing them to access corporate applications and collaborate securely.



05 Empower people to innovate with technology

With Living Systems, leaders believe in a “human + machine” approach, where humans and technology bring out the best in each other and improve workforce efficiency.

With a culture of innovation, an agile mindset, and continuous learning, employees are equipped to capitalize on new and changing opportunities as the business evolves.

New career models, skills and roles can lead to better business outcomes. The skills required will be very different and ever evolving—from today’s developers, engineers, support operations and more to UX specialists, data scientists, automation architects, AI engineers, scrum masters and business disruption predictors.

For example, one role that is central to Living Systems is the full stack engineer who bridges the divide between infrastructure, applications and data—as well as the divide between business and IT. From development to support, enabled by a high degree of automation and AI, these engineers have a full view and are an integral part of driving business value.

Sourcing talent also needs to change to better identify and deploy workers quickly who can mobilize around new priorities. This means creating an adaptable and elastic workforce across a shared pool of internal and external talent. And it means shedding a culture typified by fixed mindsets, rigid processes and organizational silos for one that rewards growth mindsets, organizational agility and customer-centricity.

Embedding an innovation mindset

Faced with digital disruption in a competitive market and a new merger, ING needed to integrate two different IT systems and remove the layers of top-down hierarchical decision making that slowed down product development. The bank needed to become a workplace of breakthrough innovation, especially if it wanted to attract top tech talent.⁴

In response, its IT department adopted “agile” development methods typically associated with digital startups. This included organizing their IT function

along business lines and prioritizing “individuals and interaction” over “processes and tools.” Small disciplinary teams combined ING’s development and operations IT functions. Instead of an extended period of hand-offs and approvals, product development became an iterative process with the goal of a minimum viable product that could satisfy early adopters and benefit from customer feedback. Using this agile way of working, a multidisciplinary team with talent from IT, product development and quality assurance developed the ING Mobile App, which showcased the bank as an innovator in mobile banking.

Reinvention in the midst of disruption

For at least the last five years, every company has aspired to become a technology company. But our research indicates that most organizations are still a long way from thinking and operating with technology at the heart of everything they do.

This kind of reinvention is viewed as disruptive and complex; the cultural and cost hurdles too great. Even as nimbler, digital native competitors sprung up around them, established players have had the luxury of time—during the past decade of global economic prosperity—to slow-walk large-scale change.

Then came the pandemic and with it unparalleled economic uncertainty. Companies have been forced to compress years of transformation into months. Those that embraced large-scale change before the crisis have shown greater business resilience with the ability to adapt and outmaneuver uncertainty.

They're now well positioned to emerge stronger. By adopting a Living Systems approach, any company can achieve similar benefits—without additional investment or disruption. In fact, there has never been a more crucial moment to discover the sustainable success that comes from Living Systems.



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Reference

- 1 Full Value, Full Stop. “[How to scale innovation and achieve full value with Future Systems](#)”. October 2019
- 2 Source: IDC. Worldwide Semiannual IT Spending Guide: Line of Business, 2019
- 3 Full Value, Full Stop. “[How to scale innovation and achieve full value with Future Systems](#)”. October 2019
- 4 INSEAD case study, “[Embracing Digital: ING’s Journey to a New Way of Working; Part 1: ING Faces Digital Disruption.](#)” November 2018. By Lucia Del Carpio, Yves Doz and Maria Guadalupe. Accessed via Harvard Business Review.

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