



Are your operations adapting as fast as your markets are changing?

TMT companies that optimize their back office will be best poised for digital transformation success.



The better the question. The better the answer. The better the world works.



Building a better
working world

Digital drives customers to expect transformational experiences. They expect immediate, even predictive, responses to their precise, personalized needs and desires. If you cannot provide this, they are one click away from a competitor who can and will. Digital provides customers with infinite options to fulfil their needs. It also allows them to immediately find the single best solution to meet those needs.

Customer expectations

64%

Percentage of consumers who expect companies to respond to and interact with them in real time¹

Many attempts to meet customers' needs are hobbled by back-office processes and systems incapable of meeting these digital expectations. A remarkable number of consumer-oriented, often TMT-sector companies, run critical business functions on decades-old technologies, following internet 1.0 processes and dated business paradigms. This technology debt must be paid before truly going digital and benefitting from this entirely new value chain.

To stay competitive, organizations must simultaneously succeed in two diametrically opposed worlds: the old "analog" world of linear, hierarchical, cost-obsessed, rule-driven processes and the new world of dynamic, distributed, result-oriented, analysis-driven collaboration. Digital transformation is the process of shifting from the former to the latter, while surviving the "awkward teenage phase," during the transitional period when both worlds coexist.

Meeting in the middle

Piecemeal application of new technologies can often harm customer perception, rather than help. TMT companies emphasize digital customer experiences, yet support functions, such as finance or operations, increasingly fall behind this leading edge.

There's little value in deploying a blockchain to instantaneously authenticate an invoice payment when the payment requires four to six weeks to process. A chatbot might answer a customer query in minutes, but fulfilment of that request may take hours or days to complete. The more we digitize the front office, the greater the cost, pain and revenue risk of antiquated back-office processes will become.

Case in point

The first driver to respond to a ride-share request earns US \$30, the second to respond earns nothing. In the digital era, where customer intimacy and instant gratification reign supreme, there is no second place. Having the right solution in the right place at the right time is no longer a competitive advantage; it is a necessity of survival.

Research from InsideSales.com shows that 35%-50% of sales go to the vendor that responds first.²

¹ <https://www.salesforce.com/research/customer-expectations/>

² <https://blog.hubspot.com/insiders/why-your-b2b-lead-response-time-is-killing-your-business>



Chapter

01

Information metabolism

Optimizing operational speed and information for
success in a digital world

Organizations are like organisms. They have a metabolism, a tempo at which they operate. To remain healthy, the whole organization must operate at the same speed, but in practice, organizations tend to be multi-speed.

Since customer-facing processes (such as sales) typically operate faster than back-office processes (such as fulfilment), a natural tension exists, and organizations can become dysfunctional if they are not responsive to the market. There is an imperative to simultaneously digitize the front and back office to remain healthy and effective.

This level of organizational ambidexterity is easier to explain than deliver, naturally.

If time is the determining factor for digital competition, and information is the fuel of the digital age, organizations must use information to speed up their metabolism. In a digital world, an organization is no better than its slowest process.

As a result, they must accelerate how they collect, analyze and apply information in creating outcomes that their customers value. Increasing your information metabolism not only reduces costs by increasing the volume of work performed, it grows revenue by increasing the frequency with which customers' needs are met.

Many leading TMT companies have already made strong commitments to the idea of digital transformation. Investments in their front office create signature digital experiences and set the bar for many other sectors.

Yet there is still tremendous untapped opportunity for these TMT market leaders across other elements of their enterprise. While they emphasize their "face" to the customer, creating unique and unprecedented customer-centric experiences, much of the back office has been neglected or underserved. This gap will become more challenging as the pace of transformation accelerates.

Organizations must digitize their back-office processes to keep pace with front-office modernization efforts while keeping the enterprise itself on an upward curve. An ever-widening gap between the digital maturity across the front and back office is a going-out-of-business model.

The ability to aggressively bring mobility, analytics, process automation and artificial intelligence to finance, HR, operations, supply chain, tax and IT functions can dramatically improve overall business results in short timeframes.

Intelligent automation (IA) technologies allow organizations to accelerate these functional areas without making substantial changes to systems or processes. IA also enhances an organization's flexibility, as digital workers can be instantly redeployed as needed.

IA enables organizations to begin embracing digital transformation without having to reengineer these functional areas wholesale. This change is coming, but with IA this change will be less painful and more achievable.

There are compelling examples and leading practices of how IA impacts each of these domain areas. When embracing IA, organizations must balance the opportunities from two perspectives:

- ▶ Doing things differently - being digitally enabled
- ▶ Doing different things - being digitally transformed

Clients on their IA journey determine the best approaches for how to scale and optimize for the future. This promotes success and drives toward achieving the desired state, capitalizing on this untapped opportunity that exists within their own walls – allowing them to set and achieve a new bar of success.



Chapter

02

Doing things differently

Transformation of existing processes for digital
business enablement

The first phase of transformation is becoming digitally enabled. Here, IA technologies such as RPA or machine learning (ML) are used to generate the same results from the same process, only faster, cheaper and more reliably. Most business processes have undergone decades of optimization around cost, hence achieving further cost savings is a challenge.

Few of these same processes have been optimized around speed, which means there is far more room for improvement in this dimension. Robots can be programmed to perform the same steps as humans, only 300%-400% faster, with greater accuracy and consistency.

Machine learning is a form of AI, and can be applied to widen the scope of automation by learning and managing through variability, where rules-based automation is insufficient. This layer of cognitive automation brings flexibility and resilience to the model, and when done at scale, the complete IA solution provides a meaningful basis for improving business performance with direct cost savings.

Reality of B2B response times:³

- ▶ The average first response time of B2B companies to their leads was 42 hours.
- ▶ Only 37% of companies responded to their leads within an hour.
- ▶ 16% of companies responded within one to 24 hours.
- ▶ 24% of companies took more than 24 hours.
- ▶ 23% of the companies never responded at all.

In back-office processes, it is not unusual to achieve 10%-25% cost reductions with IA. But it is also common to see 70%-90% reductions in process time in these same automations, without re-engineering the underlying processes.

Digitally enabling your business allows the same business results to be generated faster, cheaper and more consistently without substantial cost or disruption. This is an enormous step toward improving and harmonizing an organization's information metabolism. It also prepares the organization for the next step, which is transformation.

³ <https://blog.hubspot.com/insiders/why-your-b2b-lead-response-time-is-killing-your-business>





Chapter

03

Doing different things

Creating new and unexpected outcomes

A hallmark of digital transformation is that it generates new and sometimes unexpected outcomes and value. Frequently, this value is not predictable until after it is experienced.

When Amazon launched its same-day delivery service as part of its Prime offering, many predicted it would fail. Years later, Prime has completely changed the competitive landscape for online retail.

Similarly, Domino's new Dinner Bell service may appear to be no more than a pizza-tracking app, but the outcome of knowing exactly when your pizza will arrive may prove to be transformational.

Digital transformation means doing different things, and here IA also plays a role. Chatbots are more than a tool to automate human conversation; they may be engineered to collect time- and context-centered information from a customer so that their needs can be answered perfectly, the first time.

Artificial intelligence can be applied as a recommendation engine, sorting through enormous data sets in search of the single best answer for a specific customer need. Transformation also means that back-office functions can become more than barriers; they can be enablers of growth and innovation.



Customer satisfaction ratings for live chat are often higher than all other support channels, likely because of the speed and conversational nature.

Procurement

In procurement, digital enablement seeks to remove the remaining slack in already “lean” supply chains. Eliminating process-dwell times is a critical aspect of lean, and by increasing the speed of data capture and documentation processing further reduces this lost productivity.

Data accuracy is also critical to supply chain transparency and IA technologies provide the level of accuracy required for just-in-time management of both inbound and outbound transactions.

Digital transformation of procurement recognizes that the information about a transaction may be even more valuable than the transaction itself. An example might be tracking organic foods from farm-to-fork, or tracking the full life cycle of hazardous materials to confirm proper disposal.

Here AI technologies accurately process the enormous amount of contextual data in such tracking, and make certain that regulatory requirements are followed and reporting requirements are met in real time. This eliminates risk and lowers cost of acquisition and operations.

Improving supply chains

Same-day shipping demand

120%

Growth in mobile searches related to “same-day shipping” since 2015⁴

14%

Percentage of TMT executives who said creating a more efficient, nimble and resilient supply chain is a key objective of their organization’s automation and AI-deployment plan.

⁴ <https://www.forbes.com/sites/briansolis/2017/11/20/impatience-is-a-virtue-how-the-on-demand-economy-is-making-mobile-consumers-impatient/#2db3e1b5344c>

Source: EY Global Capital Confidence Barometer, April 2019, 20th edition. To learn more about the TMT Capital Confidence Barometer go to ey.com/ccb.



B2B contract SLA and provisioning review

In the telecommunications business, B2B contracts for network connectivity often have complex, nested SLAs and provisioning targets. It is not uncommon for a provider to under- or over-provision these connections, and thus have either contractual exposure or incremental revenue opportunities.

Using document intelligence, a company can quickly evaluate a large number (millions) of such contracts and extract actionable data that can then be compared against actual provisioned services and consumption information to determine whether exposure or opportunity exists. This type of 100% evaluation is simply not possible without automated document processing.

Procurement transformation also includes supply networks, or webs, rather than chains. Virtual agents negotiate terms and price dynamically across a network of suppliers. In this case, artificial intelligence is applied to achieve perfect synchronization of orders and deliveries and to make certain each transaction is properly governed by local conditions and requirements, rather than by centralized rules and procedures.

Smart contracts execute automatically and supply chains are self-healing; finding and securing alternatives when exceptions occur.

Tax

The challenges ahead

87%

Percentage of survey respondents across industries who said they don't have enough resources in place to identify, evaluate and respond to new tax legislation.

Source: Euromoney Institutional Investor Thought Leadership survey of senior executives

Tax is a business function that benefits greatly from IA technologies. Tax departments and the people who manage them are more involved than ever in the “business of the business” and need access to information about financial systems and operations. Often this is made possible by IA and machine learning systems that support and enhance human effort.

Manual systems can no longer keep up with the demand for instant connectedness and provide the desired links between customers and clients and tax authorities. When digitally enabled, tax rules, regulations and laws can be uniformly applied across all relevant transactions, with improved precision, accuracy and accountability.

Robots apply rules dispassionately and consistently, and can identify exceptions that may require human intervention.

A fully transformed tax function often uses machine learning and AI to help dynamically manage complex tax situations and optimize the balance between risks and rewards. The digitally-transformed tax organization uses data-driven intelligence to deliver services quicker and at higher levels of quality.

This enables professionals to free up time previously spent carrying out mundane, repetitive processes for more strategic thinking, tax planning and consulting.

When there are hundreds of thousands of tax records needing review, automation can be applied instead of literal man-hours to complete the task, allowing for the records to be reviewed in days vs. weeks. While AI can flag instances for its human counterpart's review, machine learning can adjust and pick up future efficiencies.

Our professionals, in turn, focus on upskilling to provide more effective data analytics, critical thinking, project management, agile and design thinking solutions that help our clients achieve a digital tax strategy and develop an enhanced operating model.

An example of a transformed tax function can be seen where EY assisted a telecommunications client in transforming their tax function through the strategic use of intelligent automation. High volume, repetitive tasks were automated, allowing the human staff to focus on exceptions management, decision-making and compliance with ever-changing tax laws and regulations.

Automation identified processes and tasks that were inefficient, redundant or outdated, facilitating a round of process reengineering that substantially improved the performance of the tax department. Together these changes allowed this client to realize more than US\$100m in tax savings.

As TMT companies become more digitally transformed amid the ever-changing global tax legislative and regulatory landscape, the demand for real-time information becomes more dynamic and instantaneous. This requires companies to determine if they have the operating model, systems and expertise required to adapt and execute in response as the business now requires.

Companies face options for reimagining their tax function to address these challenges while mitigating risk. Are the right people doing the right work? Should the company embark on an internal transformation that allows them to retain and improve its tax function which may be the most traditional and familiar approach, creating the least disruption?

However, it's an option that requires significant management focus and capital investment. The biggest challenge may not be around the initial investment and effort but the ability to sustain a responsive tax function and the systems, training and expertise required to support a rapidly changing environment.

The option to implement a managed service model for the tax function can be a more effective way to reduce overall tax costs and risks, by shifting IT, training and other expenditures to a third party who has already made large investments in world-leading technology, a cutting-edge data platform, global delivery centers and a network of specialist talent. The cost savings and added value achieved by managed services may be dramatic.

By taking the burden of routine tax compliance out of the business, companies can pivot internal resources for more strategic activities.

This approach allows the company to focus on core competencies such as product innovation, research and development, as well as policy, innovation and how tax law will impact their business while leaving back-office functions such as compliance matters to a third party. TMT companies move quickly to assess the impact of new approaches and new technologies in all segments of their customer-facing and internal operations; as a result, exploring a managed service model for tax needs is a valuable discussion as it often aligns to the company's goals of reducing costs through innovation to reinvest them into R&D, customer-facing solutions, and the future.



Finance

Creating a
smarter finance
function

16%

Percentage of TMT executives who said a key objective of their organization's automation and AI deployment is creating a smarter finance function.

Source: EY Global Capital Confidence Barometer, April 2019, 20th edition. To learn more about the TMT Capital Confidence Barometer go to ey.com/ccb.

Digitally enabled finance optimizes the delivery of and improves the overall quality, consistency and efficiency of capital management, while improving the effectiveness and repeatability of the overall finance value chain. IA technology in finance may include bots that perform audits, reconciliations and reporting, with greater accuracy and higher frequency.

This increases financial transparency across the organization, reducing both cost and risk.

With digitally transformed finance, a new finance digital operating model (FDOM) emerges, capable of producing real-time insights and touchless transactions. This new FDOM includes very lean and highly automated operational finance elements (O2C, P2P, transactional finance, etc.) with increased focus on shaping the real-time business decisions related to M&A, PBF (planning, budgeting, forecasting) and growth (product or service positioning, margin contribution, etc.).

The new FDOM will finally help the finance function become a true partner of the business by instantly bringing data, insights, judgment and forward-looking analysis to the table.

Finance transformation can often turn mundane tasks into strategic differentiators. In the media and entertainment (M&E) business, participations and residuals are core functions of finance. Actors, producers and other talent are often compensated via complex participations and residuals computations, and these computations are detailed in lengthy written contracts.

Historically, teams of people at each media company are tasked with the consumption, maintenance and compliance with a huge volume of contracts that cover each participant in every episode of a TV series, movie or theatrical production. With document intelligence, these contracts can be read, understood and acted upon using artificial intelligence.

This allows M&E clients to move quickly from long-form contracts to contract brief into a management system for participations and residuals. Eventually, this may eliminate the contract brief altogether. In addition to speed and efficiency, this approach brings consistency and quality to the process.

A digital operating model sets the stage for applying AI and RPA to achieve intelligent automation. To achieve an IA-transformed finance function, it may be helpful to take a “top down” approach.

The CEO and CFO commit to transform finance by moving to the new FDOM as a strategic imperative. They then set a longer-term goal of optimizing the distribution of work across people and machines.

The definition of good in this case will be a moving target, but it will come more clearly into view through continuous innovation, bringing focus to a new future of finance vision that energizes and empowers key stakeholders (board, CEO, CFO and business leaders).

It is not good enough to simply deploy IA technologies across the operational and transactional finance domain without the context of a larger digital finance vision-and-future to focus priorities and support change management. Ultimately, there is a great deal of human behavior, not only IT systems, that will need to evolve and adapt.

The future of finance creates a shared vision in which transactions will be touchless, data and insights will be available in real time, multiparty contracts will be validated instantly and payments will settle and flow seamlessly. The typical finance worker will be more comfortable staying put, than applying data science, predictive algorithms, RPA and blockchain technologies to transform the world around them.

These make for great headlines, but in daily practice emerging technologies still represent change.

Success with digital transformation requires a holistic approach. Customer-centered, front-office solutions often receive the most attention. However, back-office processes must similarly be transformed to deliver the promise of front-end solutions. Maintaining a balance between front- and back-end investment in digital improves the likelihood of success.

Similarly, moving to completely reengineered, redesigned and transformed processes may prove more difficult, and riskier, than it appears. This is particularly true for customer-facing solutions. If you promise to give your customers a transformational experience and value proposition, it's critical that your back office can deliver on that promise.

By first targeting digital enablement, organizations can identify early wins and obvious vulnerabilities in their operations, which can then be leveraged or mitigated to build upon digital success. A balanced, intentional and holistic approach yields the most reliable and resilient results, while providing speed, flexibility and adaptability along the way.

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Buy or build?

Businesses continue to transform through technology, but many are challenged to fully realize their digital vision. Forging a successful digital future will likely mean buying, as well as building capabilities in-house.

Today, investors are prepared to reward companies that make bold technology and transformational acquisitions. Digital M&A is defined by the key processes and new ways in which digital capabilities are built. In the future, only those who can execute digital M&A over a sustained period will be equipped to prosper.

According to the EY Digital Deal Economy survey, almost three-quarters (74%) of companies are looking at inorganic routes to growth through acquisitions, alliances and joint ventures. Digital M&A is still a relatively new phenomenon and a majority of companies are not adopting innovative deal processes from cyber and technology diligence to IP review required to achieve successful acquisitions.

We also see challenges around valuations you cannot apply the same methodology to a “clicks-and-order” company as you would have done to a “bricks-and-mortar” business.” To learn more about digital M&A read How can you aspire to lead in the digital economy?

The Digital Deal Economy survey was conducted by Longitude. More than 900 respondents across 26 countries and nine major industries participated. C-suite executives involved in M&A or digital strategy were invited to take part. To learn more go to www.ey.com/dde.

Almost two-thirds of buyers expect a response within 10 minutes to any marketing, sales or customer service inquiry.⁵

Summary

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Intelligent automation (IA) draws from a spectrum of technologies, such as robotic process automation (RPA), chatbots and artificial intelligence (AI).

They can equip organizations to embrace digital transformation and minimize the cost, effort and angst experienced in the journey.

A comprehensive, holistic business transformation leverages these technologies to include both customer-facing, front-office applications and customer-supporting, back-office applications. The result is a digital enterprise that can stay ahead of customer expectations for an increasingly digital and automated experience.

⁵ <https://blog.hubspot.com/news-trends/live-chat-go-to-market-flaw>



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