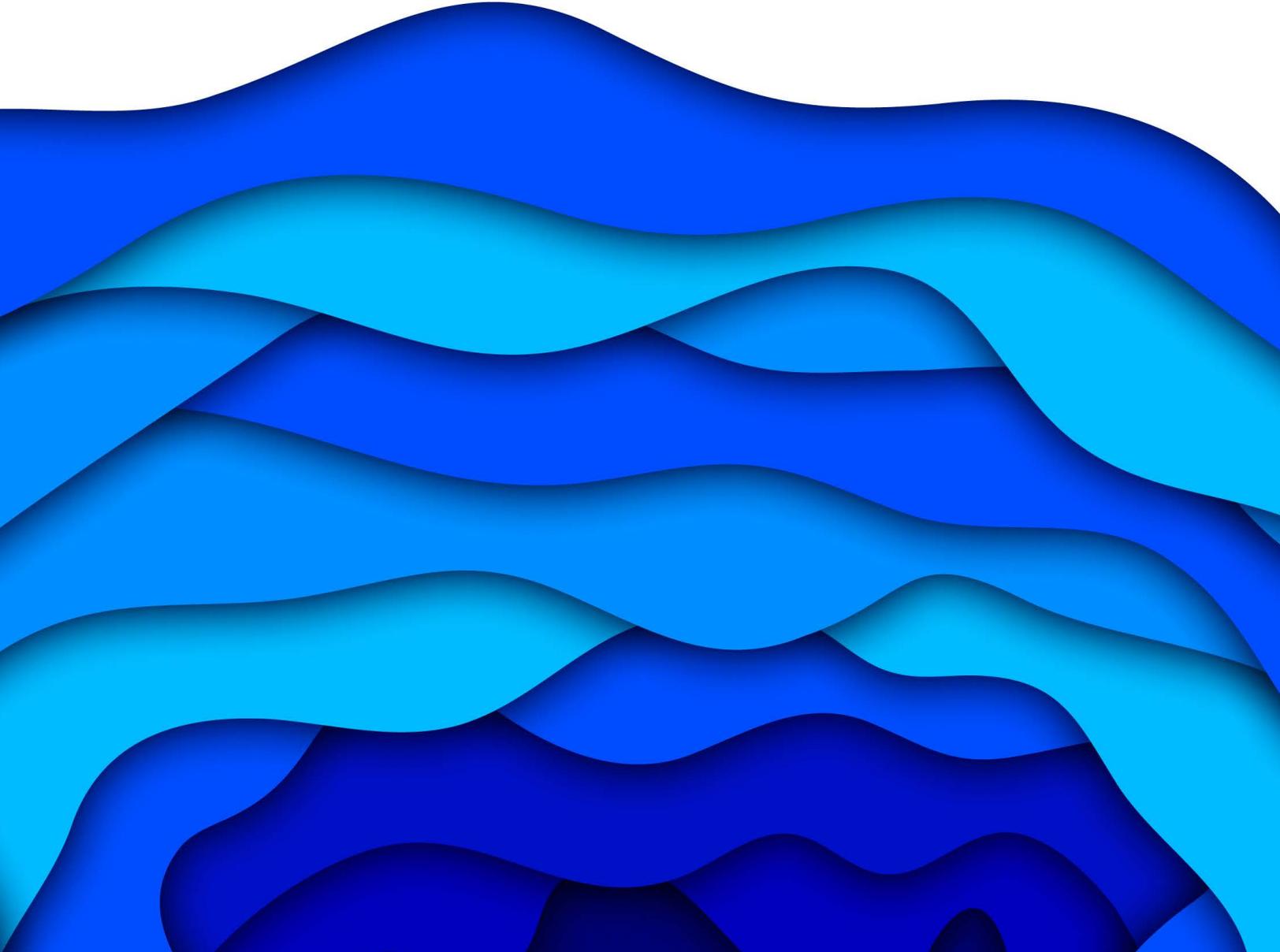# DIGITAL FINANCE
BEYOND THE HYPE

Robotic process automation. Artificial intelligence. Analytics.

Today it seems that whatever the question, the answer is either "digitize it" or "There's an app for that." Yet for most finance professionals, the only app in their app store is a spreadsheet. That's the way it's been for more than 30 years. But it doesn't have to be that way any longer.

BIG BENEFITS, DELIVERED QUICKLY

Robotic Process Automation (RPA), Artificial Intelligence (AI) and analytics are now widely available, and many companies are seeing spectacular results when they apply these capabilities to finance:

A global truck manufacturer identified $3 billion in revenue gains by applying advanced analytics to market data around the age of trucks on the road, who owned the trucks, where they were located, and where they went for spare parts and service. By realigning its own network, service portfolio, parts inventory and pricing, the company matched its capabilities to the needs of the specific market. This drove revenue while improving capital efficiency.

Seeking to rapidly improve its finance and accounting operations, a **global logistics supply chain company** deployed AI tools and RPA, increased finance process standardization from 1% to 80%, reduced invoice processing time from 15 days to 1, improved error-free processing from 30% to 75%, and reduced costs by 30%.

DIGITALLY TRANSFORMING FINANCE

In a recent **Accenture survey**, two-thirds of the respondents said that transforming finance was a priority for their organization.[1] A major part of the transformation involves moving to digitally based systems. Specifically, 33 percent of firms surveyed said that they had modernized their legacy finance and accounting systems, and an additional 48 percent reported that their organizations had plans to do so.

In the last five years the move toward RPA is an increasingly common first step. A company implements RPA to automate repetitive, transactional, everyday steps within a workflow —for example, the reconciling of payments with invoices. Thanks to RPA, companies have been able to achieve substantial benefits very quickly: a reduction of transaction costs by up to 40 percent and the increase of staff productivity by two to three times, all realizable within the first 12 months.

Figure 1 – Priority for Transformation

66%
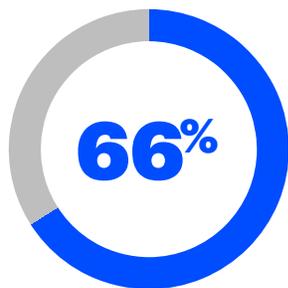
Identified Finance & Accounting
as high priority for transformation

48%
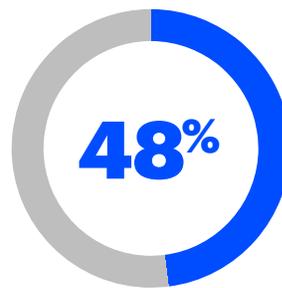
Have plans to replace legacy
systems in Finance & Accounting

Source: The Future Belongs to Intelligent Operations survey, 96 Finance & Accounting respondents, 2017, HfS Research and Accenture

Slaying the journal entry beast

Accenture teamed with a global client to create an AI app to address incorrect coding of journal entries. Using Natural Language Processing (NLP), the app analyzes descriptions of each journal entry, and classifies it based on deductive and inductive reasoning, augmented by internet data. The new process can correctly classify entries, even where information is incomplete.

Accuracy in recording transactions improved from 75% to more than 98% while helping to detect fraud and raising early error warnings. This substantially improves compliance because verification can now be conducted on all journal entries. And it frees up finance teams to analyze the numbers and recommend actions to the business.

RPA IS JUST THE BEGINNING

Leading companies are also implementing AI in their finance and accounting operations to reap further improvements.

Specifically, machine learning algorithms can be trained by humans to handle tasks as a skilled employee would. For example, the accounts reconciliation process —which many finance teams experience as a tedious and time-consuming activity—can be 80-85 percent automated using RPA. But what about the other 15-20 percent? The robot can be thrown off its routine when, for instance, a bank changes the format of its statements. By pairing the RPA tools with an AI-based system that can identify changes in format and dynamically adjust the robot's actions to manage those situations, the automation percentage moves up to 95 percent.

Another frequent application of AI in finance is for compliance and regulatory reporting. Because AI technology can sense, comprehend, act and learn, it is ideally suited to support adherence to regulations like the International Financial Reporting Standards (IFRS) 15, which provides general principles for how firms should report their revenues from contracts with customers. IFRS 15 is principle-based, meaning it provides overall guidance but no specific rules for recognizing revenues as a company fulfills a contract's performance obligations. As such, an AI approach is well suited for analyzing a company's contracts to adjudicate what revenue gets booked when.

Focus staff time on activities that matter

We collaborated with a global IT business to build a new compliance system powered by intelligent automation. The new AI-based solution has improved the company's ability to identify non-compliant T&E claims by 25 percent over the first 2 years. Once fully implemented, the solution will improve the company's ability to identify non-compliant claims by 60 percent, saving them more than $50M per year, while reducing human effort in the auditing process by up to 50 percent.

LIBERATING FINANCE PROFESSIONALS FROM THE TYRANNY OF THE SPREADSHEET

Beyond improved productivity, more effective control and increased compliance, RPA and AI systems also free finance professionals from mundane and repetitive tasks that have historically consumed 50-75 percent of staff time.

In five of the eight major types of finance work, RPA and AI can automate more than 80 percent of activities so that finance professionals can concentrate on effective planning, insightful analytics and high-value advisory support.

There's a common theme among companies deploying digital: it is not just a cost and productivity play as many earlier technology investments were. Digital technologies, when combined with business and finance acumen, also impact financial goals such as revenue growth, margin enhancement and working capital optimization. The benefits in these areas are incremental to the cost

and productivity improvements and can be 10-20 times more valuable.

For example, a multinational energy company installed an AI-based system that optimized working capital by increasing the efficiency of its accounts payable processes. Previously, the company had paid many vendors early to avoid late payment penalties. Because the new system cuts those lead times, especially for foreign payments, cash flow has been significantly improved. The company can also now identify opportunities to optimize payment terms for all suppliers. That has the potential to free up more than $300 million in working capital.

Figure 2 – Eight Major Types of Finance Work

RPA and AI can automate over 80% of the first five types of finance work.

1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Transaction Processing	Accounting	Exercising Control	Ensuring Compliance	Reporting	Analyzing	Planning	Advising

Catching the Bad Guys

Ensuring compliance to federal and international regulations is a critical issue for financial institutions, especially given the increasingly strict laws targeting money laundering and the funding of terrorist activities. At one large global bank, up to 10,000 staffers were responsible for identifying suspicious transactions and accounts that might indicate such illegal activities.[2] To help in those efforts, the bank

implemented an AI system that deploys machine-learning algorithms that segment the transactions and accounts and sets the optimal thresholds for alerting people to potential cases that might require further investigation. The system has been able to reduce the number of false positives by up to 30 percent, which allows staffers to focus more of their efforts on the accounts that require human judgment and expertise.

KEYS TO SUCCESS

Obviously, AI systems like those described here can't be built in a day. But they also don't require years to put in place, which is the case with many legacy ERP and data warehouse systems.

In fact, companies can realize significant benefits in weeks and months with significantly lower investments. It's also important to note that systems based on emerging technologies don't have to be built from scratch.[3] In many cases, digital apps are already available for general-purpose functions like natural-language processing. And specialized applications geared to finance and accounting have recently become available from companies like Google, Amazon and Accenture. The finance app store no longer offers just a single spreadsheet "app." It provides applications to support a variety of activities, from account reconciliations and capital expenditure investment appraisals to customer and product profitability analysis and more.

That said, executives need to remember that realizing the full value from digital investments is not just a technology issue. Simply automating existing, inefficient processes will produce limited results. Combining technology enablement with business domain expertise and financial acumen is the key to success.

To get started, companies should design for specific outcomes they are trying to achieve rather than just focusing on incremental process improvement. A global hospitality brand, for example, sought to improve the integrity and accuracy of its financial statements, while a global IT business wanted to improve compliance and reduce unnecessary travel and expense (T&E) spending.

In the conceptual design process, executives need to think beyond automating existing processes and, instead, try to re-imagine processes through the lens of AI. This re-imagination includes looking beyond cost reductions and the replacement of workers and focusing on augmenting employee capabilities to achieve step-change improvements in performance. When, for example, a company uses AI to identify which client accounts are most likely to default, employees can then more proactively work with those customers to retain their business. This might require upskilling some employees to assume new, higher-value roles. But that investment can be more than offset by a resulting bump in revenue. It's these types of improvements that can help transform the finance function from cost center to revenue generator.

Figure 3 – Five Rules for Leveraging AI

1 Design for outcomes that have meaningful business impact.

2 Leverage ecosystem partners and build on existing technologies developed by others.

3 Think beyond automating existing processes. Re-imagine processes through the lens of AI, deploying it to augment employee capabilities and achieve performance improvements.

4 Build closer partnerships between the business and IT—a must to transform specific business processes.

5 Invest in upskilling employees to prepare them to assume future roles of higher value.

ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world's largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 459,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives. Visit us at **www.accenture.com**.

AUTHORS

Manoj Shroff
Managing Director, Accenture Operations
Finance and Accounting Business Process Services Lead
manoj.shroff@accenture.com

David Axson
Managing Director, Accenture Strategy
CFO and Enterprise Value
david.a.axson@accenture.com

STAY CONNECTED

For more information visit:
www.accenture.com/digitalfinance

FOLLOW US

- www.twitter.com/AccentureOps
- www.linkedin.com/company/accenture-operations
- www.accenture.com/intelligentoperationsblog
- www.youtube.com/c/AccentureOperations
- www.instagram.com/AccentureOperations
- www.slideshare.net/AccentureOperations

ENDNOTES

1 HfS Research and Accenture, "See more, do more, be more: The Future Belongs to Intelligent Operations," 2018.

2 Paul R. Daugherty and H. James Wilson (Accenture), *Human + Machine: Reimagining Work in the Age of AI* (Boston, Harvard Business Review Press, 2018): pp. 45-46.

3 H. James Wilson and Paul Daugherty (Accenture), "What Changes When AI Is So Accessible that Everyone Can Use It?" Harvard Business Review, January 30, 2018.