



Digital Transformation in K-12 and Higher Education: Digital Document Workflows for Agility and Improved Services

Document digitization and electronic signatures modernize workflows to create more accurate, secure, and convenient experiences for students, parents, faculty, and staff.

RESEARCH BY:



Ruthbea Yesner
Vice President, Government Insights,
Education and Smart Cities, IDC



Holly Muscolino
Research Vice President, Content and Process
Strategies and the Future of Work, IDC



Navigating this InfoBrief

Click on titles or page numbers to navigate to each section.

Executive Summary	3	Encountering Risks with Paper-Based Systems.....	10
Modernizing to Meet Changing Expectations.....	4	Reducing Risks with E-signature Technology.....	11
Responding to Permanent Changes in School environments	5	Implementing E-signature Technology	12
Accelerating Digital Transformation.....	6	Supporting Digital Transformation with E-signature Technology.....	13
Benefitting from Digital Transformation	7	Kickstarting Digital Transformation	14
Transforming Education with Digital Document Workflows	8	About the Analysts	15
Improving Document Workflows with E-signatures	9	Message from the Sponsor.....	16

Executive Summary

Digital transformation (DX) in K–12 and higher education in the U.S. is accelerating. As a result of COVID-19, DX plans are being implemented more quickly to modernize and digitize operations.

There will be permanent changes post-pandemic in response to demands from staff, faculty, teachers, parents, and suppliers that require seamless digital document workflows, without manual or paper-based interruptions.

A key component of a seamless, secure digital document workflow is e-signature technology which provides a multitude of benefits including:

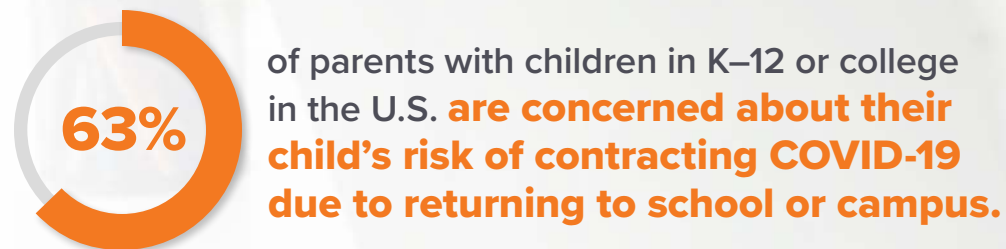
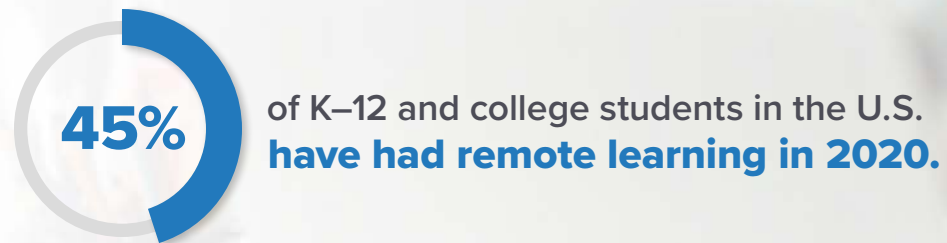
- ✓ supporting a more productive hybrid workforce
- ✓ providing a better employee and student experience
- ✓ reducing workflow errors
- ✓ maintaining compliance

Why are digital document workflows a key priority in education?

- ▶ Document volumes are increasing.
- ▶ The education workforce, and school operations, will continue to be hybrid — with remote and onsite workers.
- ▶ Students, parents, and suppliers prefer to handle administrative tasks digitally.

Educational Institutions Must Modernize to Meet Changing Expectations ...

Even with progress to control COVID-19 underway, schools will not return to normal soon.



Almost one-fifth of parents would like to see virtual learning opportunities continue.

What were once considered essential onsite interactions will fundamentally change **as student expectations evolve and technology features and functionality advance.**

With more options for online learning and courses, schools need to prove their value. This is especially true for higher education, **where students want to see an ROI for their investment** in the form of well-paying jobs and marketable skills.

Seamless digital services and administration helps in many areas such as **faster hiring and student enrollment, and more accurate contracts and forms.**

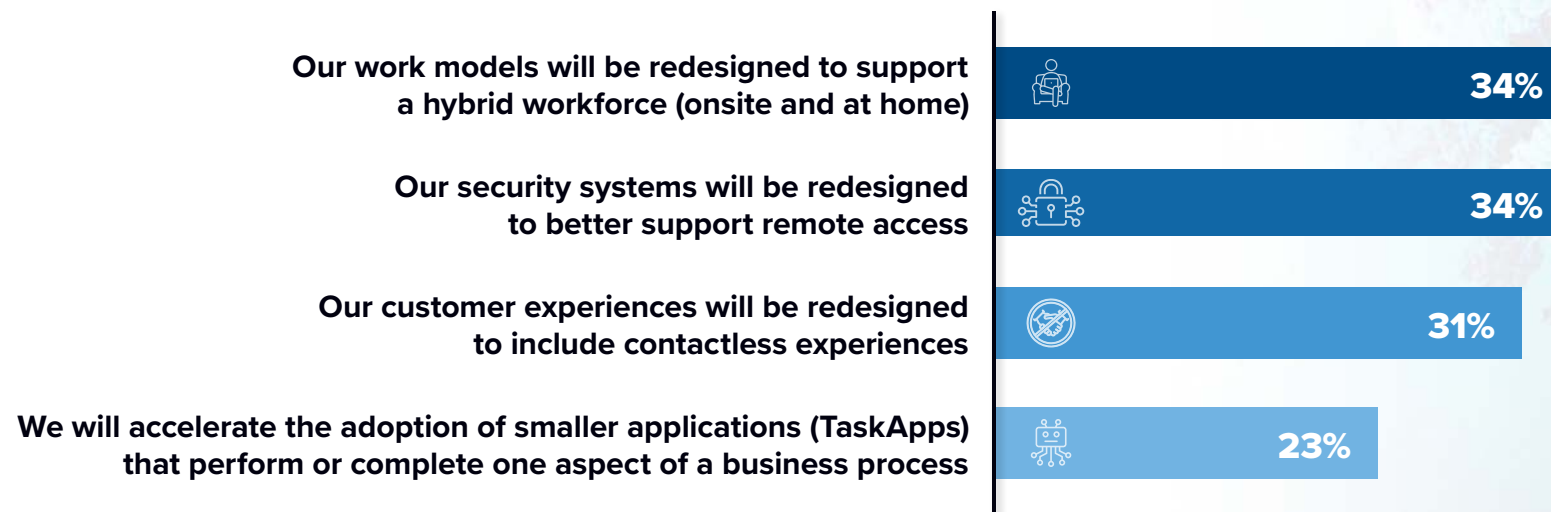
n = 2,000 U.S. consumers | Source: Consumer Experiences Survey, IDC, September 2020

... And Respond to Permanent Changes in Teaching, Learning, and School Environments

Permanent changes will include a more hybrid workforce, more online, contactless self-service, and business operations that are increasingly automated and remotely managed.

Q. Which of these areas will likely be permanently changed as a result of the COVID-19 pandemic?

(% corresponds to number of education respondents – multiple dichotomous table – total will not sum to 100%)



Technology needs to change to support new operating models.

Educational institutions indicate that technologies will focus on the support of new work models, improved experiences, and better security for remote access.

Source: COVID-19 IMPACT ON IT SPENDING Survey (Survey conducted September 26–October 6), IDC, October 2020, Education respondents

COVID-19 Has Pushed Forward Plans to Adopt Technologies for Digital Transformation

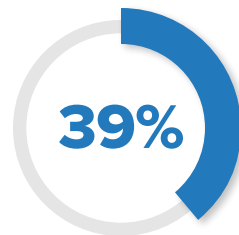
“We are willing to take risks.”



of educational institutions say that in the next six months their approach to technology investment will be as leaders and early adopters of technology.

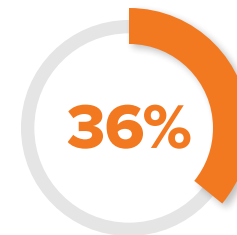
IDC defines **digital transformation (DX)** as “a means of applying new technology to radically change processes, customer experience, and value.”

K–12 schools, colleges, and universities are working to rapidly modernize to deliver digital content and services characterized by a mix of onsite and distance learning, remote work and telework, digital administration, and new virtual offerings.



are accelerating their DX efforts.

and



are investing in technology to close the gaps in DX efforts.

U.S. schools are willing to take more risks and try new solutions to address existing challenges and gaps in DX strategy.

Source: COVID-19 IMPACT ON IT SPENDING Survey (Survey conducted July 20–31), IDC, July 2020

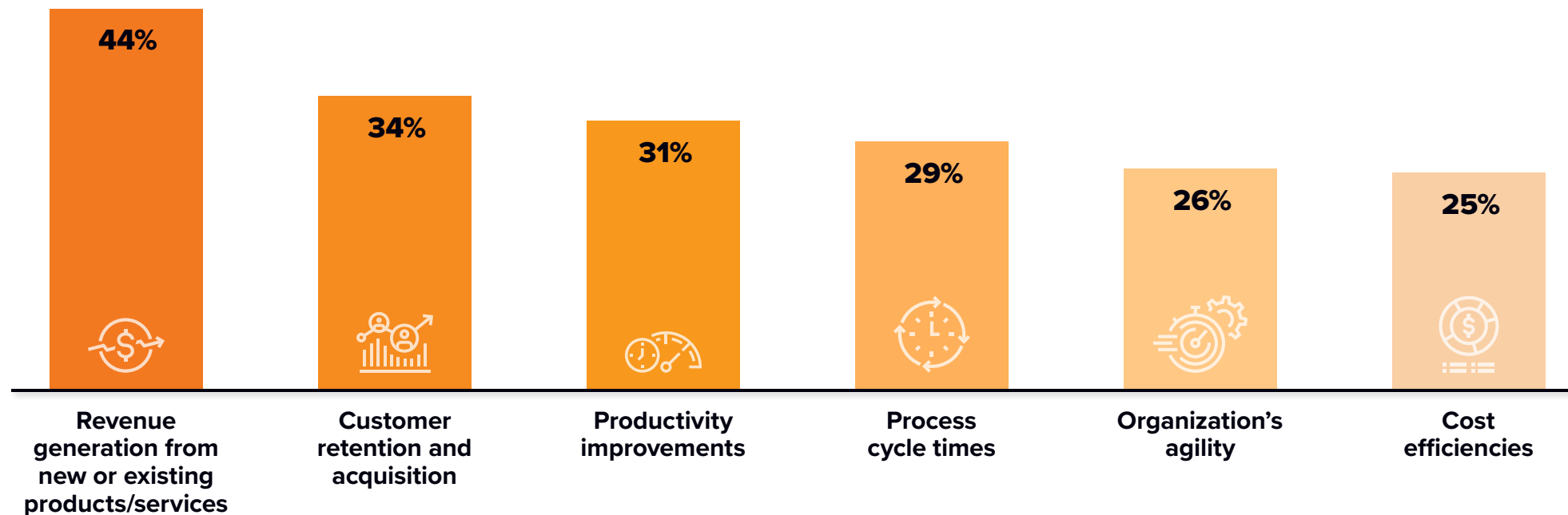
Source: COVID-19 IMPACT ON IT SPENDING Survey (Survey conducted June 4–15), IDC, June 2020

Digital Transformation Acceleration Brings Concrete Benefits

DX is a journey of large-scale change that helps institutions manage and embrace innovation and digital disruption, as opposed to merely updating or enhancing existing processes, technologies, and models.

Benefits of Digital Transformation

(% corresponds to number of education respondents – multiple dichotomous table – total will not sum to 100%)



education sample n = 151 | Source: IDC Global DX Leaders Survey, 2019

Digital Document Workflows Are a Key Aspect of Digital Transformation in Education

A white circular gauge with a white arc indicating 35% completion. The number '35%' is written in white inside the circle.

35%

of educational institutions expect **document volumes to increase over the next 18–21 months.**

Educational institutions need to prioritize the development of digital document workflows, moving from manual to automated, and from paper to digital, to ensure continuity of operations and to meet student, staff, and faculty demands for contactless, online services.

A white circular gauge with a white arc indicating 77% completion. The number '77%' is written in white inside the circle.

77%

of document workflows in U.S. education **involve some paper-based or manual processes. This means digital workflows are interrupted** — even if documents originate internally, they still may need to be printed.

Many institutions are examining how to ensure that their document workflows are fully digital, for example, using PDF-based workflows and eliminating the need to print, get wet signatures, and scan and/or mail student-facing forms and operational forms such as faculty onboarding packets or vendor contracts.

Source: Adobe Business Digitization Thought Leadership Study, IDC, August 2019

E-signature Solutions Are Essential for a Seamless Digital Document Workflow

Educational institutions still use a tremendous amount of paper and have a high number of documents per week that need signatures. 54% of documents, when signed, are still in paper format.



Document workflow is currently disrupted by manual and paper-based steps. For example, while many documents may start in digital format, getting wet signatures requires printing, scanning, and in-person meetings for everything from staff and faculty onboarding to student admissions and enrollment paperwork to contracts for facilities management.



of educational institutions **have not deployed an e-signature solution for documents that originate internally** and require signing by either internal or external parties.

Source: Global eSignature Opportunity Assessment Survey, IDC, October 2020

As Document Volumes Increase, Paper-Based Systems Expose Schools to More Risks

In the U.S. in 2020, educational institutions averaged **85,000 signed documents per week**.

Administrators and staff in education perceive paper as being more secure and/or compliant.

However, paper-based signatures expose organizations to:



More errors or inaccuracies



Breaks in the chain of custody



Problems with version control



Slower workflow and business processes

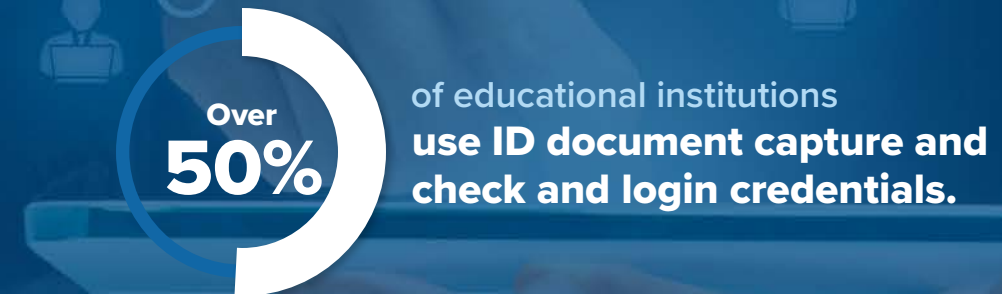
Source: Global eSignature Opportunity Assessment Survey, IDC, October 2020

E-signature Solution Capabilities Reduce Risks

It's time to embrace the upsides of e-signature technologies.

Why are digital document workflows a key priority in education?

- ✓ Electronic signatures offer a **technical way to track chain of custody and authentication** that paper-based forms do not.
- ✓ **Paper-based forms can only be tracked or authenticated if signed in person** and never removed from the physical office setting.
- ✓ Forms with e-signatures **can be digitally monitored and have embedded authentication tools.**



Source: Global eSignature Opportunity Assessment Survey, IDC, October 2020

Implementing E-signature Technology Has Immediate Benefits

For those schools who have deployed an e-signature technology, the benefits are clear.



Increased security:

E-signatures track the chain of custody of forms and can ensure the secure transfer of sensitive documents among stakeholders.

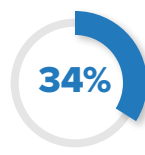


report increased security of signing workflows.



Improved productivity:

E-signatures allow for faster turnaround times of forms and documents from parents, teachers, and outside contractors, and enable staff to focus on more important tasks.

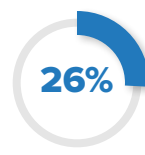


report decreased transaction times.



Enhanced compliance:

E-signatures work in support of regulations, such as FERPA, COPPA, and Section 508 regulations, and can be used in IEPs, health forms, and legally binding documents.

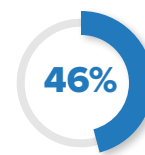


report better compliance with regulations.



Hybrid workforce support:

Education staff are dispersed across multiple buildings and locations. E-signatures help to ensure a digital workflow for remote and contactless services.

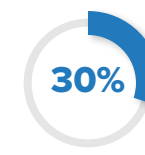


report they enabled signing workflows for remote and/or dispersed workers.



Better experiences:

Today, parents, students, and employees prefer to handle administrative tasks when and where it is convenient for them.



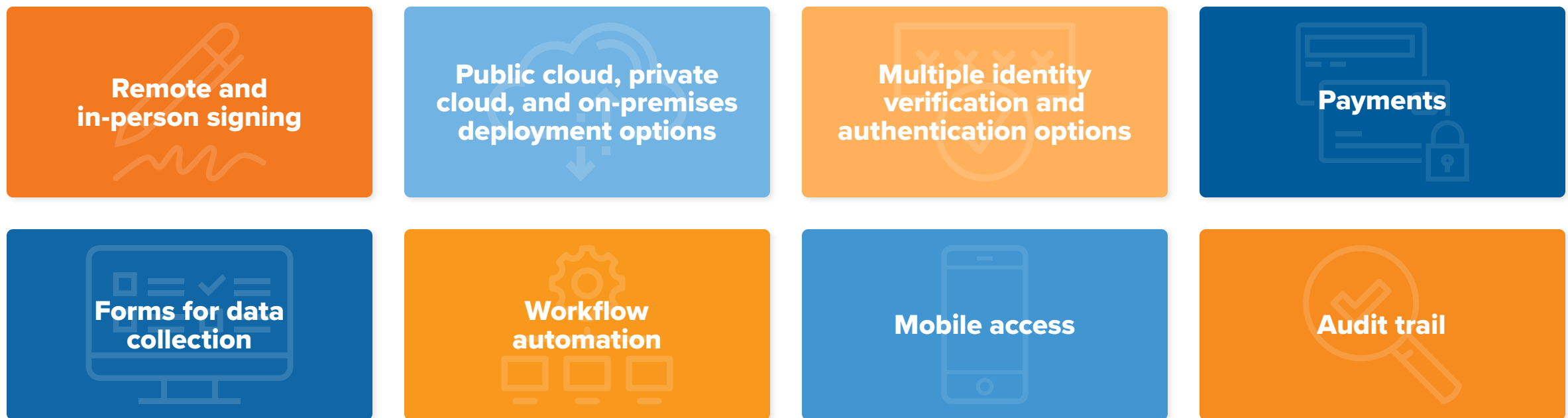
report improved customer experience; over one-fourth report improved employee experience.

Source: Global eSignature Opportunity Assessment Survey, IDC, October 2020

E-signature Technology Supports Digital Transformation with Agile, Flexible Solutions

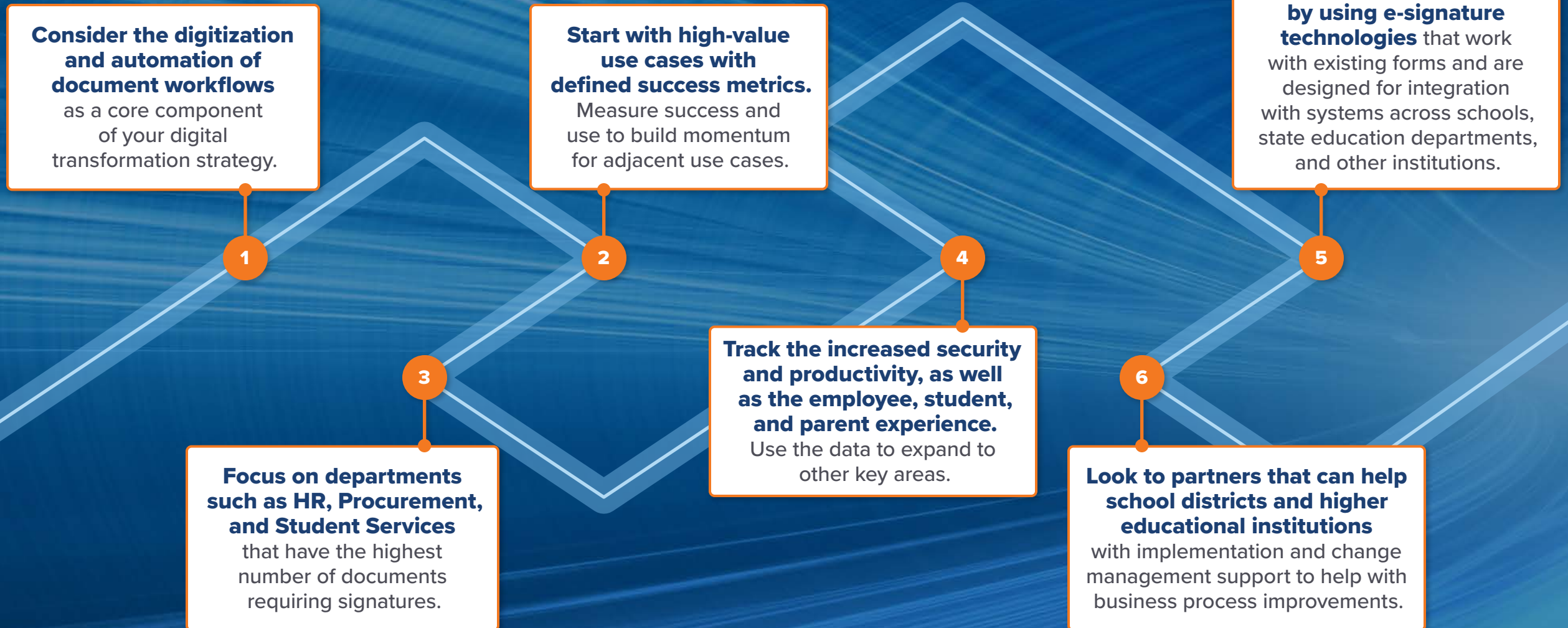
E-signatures support the new paradigm of education by offering a flexible solution that can be used in person or remotely, via mobile or desktop devices, and with private cloud, public cloud, or on-premises deployments.

Top features of e-signature technologies include:



Source: Global eSignature Opportunity Assessment Survey, IDC, October 2020

Kickstarting Your Digital Transformation Journey with E-signatures



About the Analysts



Ruthbea Yesner

Vice President, Government Insights,
Education and Smart Cities, IDC

Ruthbea Yesner is the Vice President of Government Insights at IDC. In this practice, Ruthbea manages the U.S. Federal Government, Education, and the Worldwide Smart Cities and Communities Global practices. Ruthbea’s research discusses the strategies and execution of relevant technologies and best practice areas, such as governance, innovation, partnerships, and business models that are essential for government and education transformation.

Ruthbea’s research includes analytics, artificial intelligence, open data and data exchanges, digital twins, artificial intelligence, the Internet of Things, cloud computing, and mobile solutions in the areas of economic development and civic engagement, urban planning and administration, smart campus, transportation, and energy and infrastructure. Ruthbea contributes to consulting engagements to support K–12 and higher education institutions, state and local , and IT vendors’ overall Smart City market strategies.

[More about Ruthbea Yesner](#)



Holly Muscolino

Research Vice President, Content and Process
Strategies and the Future of Work, IDC

Holly Muscolino is the Research Vice President, Content and Process Strategies and the Future of Work, responsible for research related to innovation and transformation in content and process solutions, including intelligent process automation and content workflow services. Holly’s core coverage also includes the role of technology in driving the Future of Work.

[More about Holly Muscolino](#)

Message from the Sponsor

Adobe Acrobat and Adobe Sign are trusted solutions for educational institutions that want to go paperless with e-signatures and PDF-based workflows that are seamless, secure, and compliant.

Learn more about how your school can reduce the administrative burden on faculty and staff and free up more time for creating a nurturing educational environment.

[Adobe Sign for Education](#)

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

IDC Custom Solutions

This publication was produced by IDC Custom Solutions. The opinion, analysis, and research results presented herein are drawn from more detailed research and analysis independently conducted and published by IDC, unless specific vendor sponsorship is noted. IDC Custom Solutions makes IDC content available in a wide range of formats for distribution by various companies. A license to distribute IDC content does not imply endorsement of or opinion about the licensee.



[idc.com](https://www.idc.com)

[@idc](https://twitter.com/idc)

Copyright 2021 IDC. Reproduction is forbidden unless authorized. All rights reserved.

Permissions: External Publication of IDC Information and Data

Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

IDC. Doc. #US47298121