At Pearson we have a clear mission: to help people make *progress* in their lives through *learning*.

We are focusing on the changing needs of the world's education markets, and our strategy is to combine content and assessment, powered by services and technology, leading to more effective teaching and personalised learning at scale.

That is at the heart of what we do and is reflected through our three strategic priorities: We are growing market share through our digital transformation, focusing on structural growth markets and becoming a simpler and more efficient business. See *Our strategy*, p13

This will enable us to drive innovation by providing more authentic learning and assessment experiences, helping more learners around the globe build their skills and be better prepared for the future world of work.

Pearson products provide:

1 Better learning

"I can't imagine *a better way to learn.*

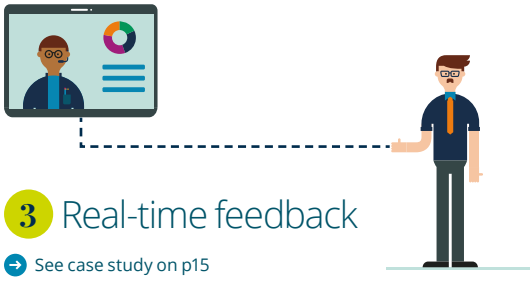
"The digital experience that students get can really shape their understanding of the subject – it gives them a real world feel, with first class pedagogy and assessment built in."

Pearson author Glenn Hubbard on why he and partner Anthony P O'Brien are transforming their classic textbook from print format into a digital education experience.

See case study on p43

2 Anywhere, anytime technology

See case study on p15



3 Real-time feedback

See case study on p15

Our KPIs

We measure our progress against three broad categories of KPIs: financial, business and non-financial measures.

These two pages summarise performance against all of these KPIs. More details on the performance, trends and factors influencing select KPIs are described within the relevant sections throughout this report.

R See how we link strategy to how management is rewarded on p90.

Financial measures

Maintain long-term growth

Indicator	2017	Underlying change	Reference
Sales R	£4,513m	-2%	p35
Adjusted operating profit R	£576m[1]	-9%	p35
Operating profit	£451m[2]	n/a	

Deliver sustainable returns

Indicator	2017	Headline change	Reference
Adjusted earnings per share R	54.1p[1]	-8%	p36
Basic earnings per share	49.9p[2]	n/a	
Return on invested capital (gross basis) R	4.3%	-0.7 percentage points	p36
One year total shareholder return R	-4.5%[3]		
Dividend per share	17p	-67%	p7

Manage our cash and balance sheet

Indicator	2017	Headline change	Reference
Operating cash flow R	£669m[1]	+1%	p37
Net cash generated from operations	£462m[2]	-11%	
Net debt	£432m	+60%	p37

1 See p36–38 for an explanation of these alternative performance measures and p192–195 for full reconciliation of the numbers to the equivalent statutory measure and definitions of headline and underlying variances.
2 Equivalent statutory measure.
3 Source: Datastream.

Our KPIs

Business measures

1 Grow market share through digital transformation of our courseware & assessment businesses ®

Indicator	Performance	Reference
2017 Digital revenues[4] ■ Digital: 32% ■ Digitally enabled: 27% ■ Non-digital: 41%		p14
US higher education courseware	Market position: #1	p14
US assessment	Market position: #1	p14
UK assessment[5]	Market position: #1	p14

4 Excluding GEDU, WSE and US K-12 courseware.
5 Includes both vocational and general qualifications.

2 Invest in structural growth markets

Indicator	Performance	Reference
Virtual schools (Connections)	Market position: #2	p16
Global online program management	Market position: #1	p16
Global professional testing (Pearson VUE)	Market position: #1	p16
English	Market position (courseware): #2 Market position (testing): #3	p16

3 Become simpler & more efficient ®

Indicator	Performance	Reference
Expected cost savings 2017-2020 programme[6]	c.£300m	p18
Restructuring costs in 2017	£79m	
Planned headcount reduction 2017-2020 programme	c.3,000	p18

6 Phased plan first presented on August 4 2017, based on December 2016 FX rates. Note: A significant part of these costs and savings are in US Dollar and other non-Sterling currencies and so subject to FX movements over the implementation timeframe.

Non-financial measures

Talent & employee engagement

Indicator	Performance	Reference
Executive team's achievement of quarterly employee engagement milestones	100%	p27
% of Senior Leadership Group with development goals	89%	p27
Employees taking at least one course on Pearson's internal training programme, PearsonU	83%	p27

Strengthen brand & reputation

Indicator	Performance	Change	Reference
Awareness of Pearson among teachers, learners and parents	59%	+2 percentage points	
Favourability of those aware of Pearson	89%	+1 percentage points	

Deliver gender diversity

Indicator	Performance	Change	Reference
Female Board members	30%	no change	p29
Female senior managers[7]	30%	-2%	p29
Female employees	61%	+1%	p29

7 Two reporting lines from the Chief Executive.

Reduce our carbon footprint

Indicator	Performance	Change	Reference
Global greenhouse gas emissions (Metric Tonnes of CO_2e)	104,384	-17%	p29

Maintain investment in communities & social innovation

Indicator	Performance	Change	Reference
Target 1% or more of adjusted pre-tax profits	£7.2m	+1.4%	p31

About Pearson

Pearson is the world's learning company, providing a range of products and services to help people across different learning stages make measurable progress in their lives.

Where we operate

We operate in 70 markets worldwide, with a focus on those below. We report by geography because this is how we deliver learning: through providing a range of educational products and services to institutions, governments, professional bodies and individual learners in our key markets around the world, helping people everywhere aim higher and fulfil their true potential.

Sales by geography

North America

Sales

£2,929m

Our largest market including all 50 US states and Canada.

Core markets

Sales

£815m

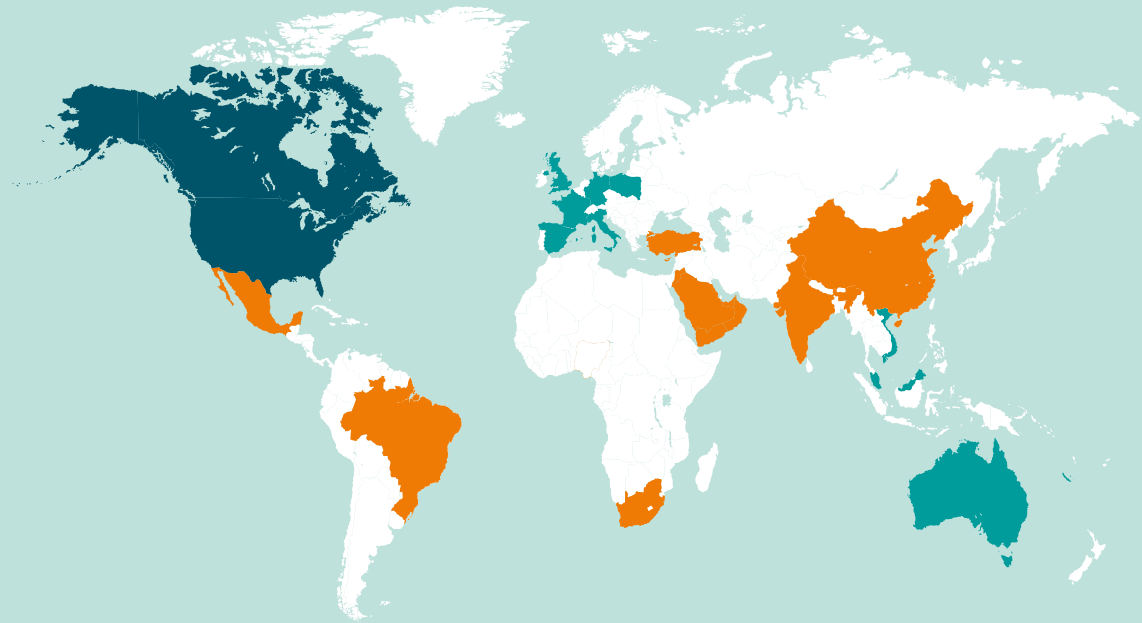
Our international business in established and mature education markets including the UK, Australia, Italy, France, Germany, Spain, Poland, Singapore, Malaysia and Vietnam.

Growth markets

Sales

£769m

Our growth markets in emerging and developing economies, with investment priorities in Brazil, India, South Africa, Mexico, Hong Kong & China, and the Middle East.



What we offer

We provide content, assessment and digital services to schools, colleges and universities, as well as professional and vocational education to learners to help increase their skills and employability prospects. Increasingly, we do this through partnership models where we bring investment, expertise and scale to help deliver better learning outcomes.

Sales by products and services

Courseware

Sales

49%

We provide world-leading educational content for use in both traditional and digital learning.

Assessment

Sales

30%

We provide assessment services to measure and validate learner progress, and to certify competency.

Services

Sales

21%

We provide integrated services that help educational institutions improve learner outcomes.

Courseware

Higher Education

Our personalised course content and digital resources help educators build knowledge and unlock learners' potential. We increasingly sell direct to consumers and to educational institutions so students can come to class completely prepared from day one. This helps drive better learning experiences and outcomes.

See case study, p15

Schools

Our content business for schools in the US, UK and globally provides educational instructional resources, curriculum materials, digital learning tools and assessments to help to educate children across the world. Going forward, we are focusing our school content business on markets outside the US.

English

Pearson English language teaching develops courses, qualifications and learning tools to make teaching English easier.

Assessment

Schools

We partner with US educators and districts to develop new, personalised ways of learning through effective, scalable assessments that measure 21st century skills and inform instruction for all learners. In the UK, Pearson is a market-leading, award winning organisation offering academic and vocational qualifications. We're leading the adoption of AI (Artificial Intelligence) in assessment to support better learning.

See case study, p45

Professional certification

We help organisations measure and make improvements to ensure the success of employees and learners. Test owners and test takers across the world choose us to help develop, manage, deliver and grow their computer-based testing programmes. With the industry's most secure testing environments, we're the leader in computer-based testing.

See case study, p42

Clinical assessment

We provide assessment solutions to help professionals through the identification and management of barriers to learning and functioning in daily life. Our wide range of assessment and intervention products are used by psychologists, speech language pathologists, occupational therapists, counselors, human resources and talent management professionals.

English

Our fast-growing test, Pearson Test of English Academic, is the world's leading computer-based test of English for study abroad and immigration.

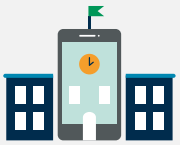
Services

Online Program Management

Pearson helps higher education institutions launch or expand online degree programs enabling them to increase enrolments, support online learning, boost graduation rates and deliver on employability.

Virtual schools

Connections Education is an accredited provider of high-quality, highly accountable virtual education solutions for students in grade K–12, including online schools, online courses, instructional tools and more.



See case study, p17

Fully integrated programmes

Our sistemas businesses offers a complete package of products and services for private and public K-12 schools in Brazil. We provide courseware, educational assistance, professional development, management consulting and marketing support, as well as digital content. In India we offer similar whole-school academic partnerships called MyPedia.

See interview on p47

English

Leading the English learning market in Brazil, we offer a diverse methodology in a franchising based model to help learners improve their lives by learning a second language.

Link to strategic priorities 1 Grow share through digital transformation 2 Invest in structural growth markets See *Our strategy*, p13–21

Chairman's introduction

"2018 is a pivotal year for Pearson – it is the first in several when Pearson is expected to return to underlying profit growth."

Sidney Taurel
Chairman

Dear shareholders,

This has been an important year in the company's transformation and significant progress has been made in 2017. On an operational level, the company has stabilised and, for the first time in several years, Pearson has met both internal and external expectations. We are still in the midst of a transformation and the environment in our largest business, US higher education courseware, remains challenging. However, we continue to take action and have a good handle on these challenges, as well as on the growth opportunities in other parts of our business, leaving us well placed to meet our long-term aspiration to be the leader in digital learning.

From a Board perspective, management is faithfully executing on our strategy, as seen through the actions taken to simplify the company, focus our portfolio, invest in our digital capabilities and invest in growth opportunities that will drive the future of Pearson. 2017 performance provides a solid foundation from which to build, with Pearson aiming to return to underlying profit growth in 2018.

Overseeing our strategic progress

The Pearson strategy must meet the evolving demands of learners while delivering sustainable returns to shareholders. Pearson meets those demands by combining world-class content and assessment, powered by services and technology, to support more effective teaching and personalised learning at scale. To deliver on the strategy, Pearson is focused on three priorities:

1. Grow share through the digital transformation of our courseware and assessment businesses
2. Invest in the biggest structural growth markets
3. Simplify the company, becoming more efficient and delivering better customer experiences.

A key tenet of the strategy is investment in content and technology to ensure Pearson has the skills and platforms to keep its products relevant, to become more agile in its digital capabilities, and to provide a robust infrastructure to deliver efficiencies. In turn, these will help Pearson win market share with products that deliver better outcomes, provide better customer experiences and deliver sustainable long-term growth, driving greater value for shareholders. You can read more about these priorities on p13–21.

Our simplification journey

Pearson enters 2018 in a strong financial position because of tight management of costs, actions to simplify the portfolio and a sharper focus on the biggest opportunities – areas that are consistent with our previously announced simplification strategy. In July 2017, the Board sanctioned the sale of a 22% stake in the Penguin Random House venture to Pearson's joint venture partner Bertelsmann, and the recapitalisation of its remaining 25% stake in the business.

In the latter part of the year, Pearson also agreed the sale of two of its direct delivery businesses – GEDU and Wall Street English. Pearson has raised £2.4bn from strategic disposals since 2015, which has helped Pearson greatly strengthen its balance sheet, reinvest back into the business and return excess capital to shareholders. In October 2017, Pearson commenced a share buyback programme, completed on 16 February 2018, repurchasing a total of 42.8m shares at an average price of 700p.

Shareholder returns

It is my job to ensure that capital is allocated appropriately on behalf of our shareholders. I know that shareholders are disappointed about the reduction of the dividend in 2017. This was not a decision the Board took lightly and it reflects a continued focus on maintaining a strong balance sheet, investing in Pearson's digital transformation and sustaining a solid investment-grade credit rating.

Governance at Pearson

Leadership and effectiveness

Board members challenge and debate strategy, performance, responsibility and accountability to ensure that the decisions we make are robust. Board activity and performance are assessed annually.

Accountability

Detailed risk assessment and management information shapes all strategic and operational decisions, with clearly defined Board and management responsibilities and processes.

Engagement

Building strong relationships with our diverse stakeholders is crucial to our sustainable success. We aim to engage through many forums, and channels, to build trust.

See our Governance report on p61–110

Remuneration

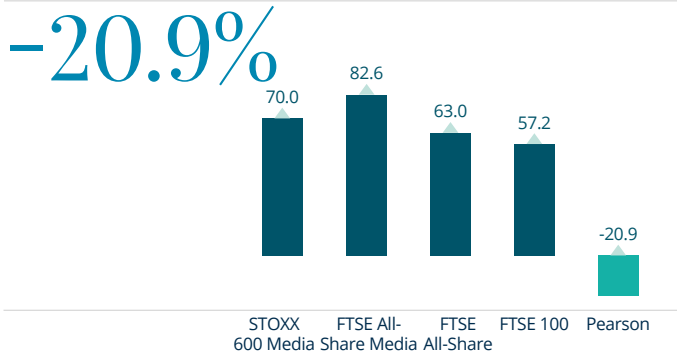
Our remuneration policy aligns with strategy and adapts to market conditions and performance.

See our Remuneration report on p90–105

Chairman's introduction

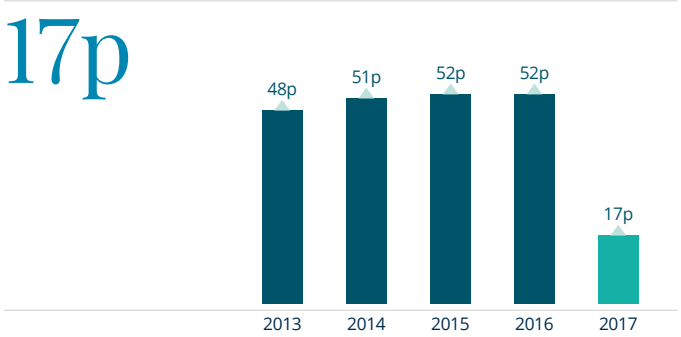
Key performance indicators *Deliver sustainable returns*

Total shareholder return (Five years % change)



Five-year TSR in 2017 was -20.9% which compares with a 57.2% return on the FTSE 100 Index of large UK listed companies. Our recent share price performance has been disappointing but we are confident that the plans and strategy laid out in this report will continue to make Pearson a simpler, stronger company, and that they set the company up for a sustained period of growth and value creation.

Dividend per share in fiscal year (pence)



We cut our dividend in 2017 to reflect portfolio changes, increased product investment and challenging market conditions in our largest business. Our intention is to pay a sustainable and progressive dividend that is comfortably covered by the earnings of our ongoing business, excluding any contribution from our stake in Penguin Random House.

Our stated objective in the long term is to rebuild our payment to shareholders, reflecting the Board's long-standing confidence in the strong future cash generation of Pearson. At this stage, we are focused on striking the right balance between short-term shareholder reward and investing in the long-term success of the business. As a result, the proposed final dividend payment for 2017 is 12p per share, taking the full year dividend to 17p per share.

Board engagement with our investors and company stakeholders

The 2017 financial year has been one of significant engagement with our shareholders. I have enjoyed spending time throughout the year with many of you to ensure that we maintain an open, transparent dialogue, keep you updated on our strategy and receive your inputs.

Since May 2017, Elizabeth Corley, who chairs the Pearson Remuneration Committee, has led our work to engage with investors in connection with Pearson's remuneration policy and to listen to your concerns. It is clear that shareholders and other stakeholders would like our approach to remuneration to be simple and transparent, closely linked to our strategy and the company's performance.

We have worked hard to develop an approach that the majority of our shareholders can support. Elizabeth explains our approach in more detail in the remuneration section of this report on p90–105, and I would like to thank those who helped us refine our proposals.

More broadly, our Board members have been engaging with educators, learners, community and thought leaders, and other stakeholders in a variety of ways. This remains an ongoing area of focus for us – you can read more about our engagement in the governance section on p61–110.

Investing in world-class talent

A company that is moving to a digital-first model needs to have the best and brightest talent to help guide it through the transition. I am pleased that in 2017 we made a number of significant hires – at Board and Executive level, as well as across the entire company.

Over the last few years we have further strengthened the composition of our Board through the addition of more technology knowledge, more international experience and greater depth regarding transformation. For example, Michael Lynton joined us as an Independent Non-Executive Director on 1 February 2018. Michael was formerly Chairman and CEO of Sony Entertainment, and CEO of Sony Pictures Entertainment before that. He is currently Chairman of Snap Inc., the owner of messaging start-up Snapchat, and brings a wealth of experience and expertise.

I believe we have a strong and experienced Board, fully engaged with the business and focused on helping guide Pearson back to growth. All across Pearson, there is a focus on developing necessary skills and capabilities to ensure Pearson has the right talent, building a market-leading, digital-first business.

Looking ahead

Pearson has an important role to play in supporting customers across the globe to make progress in their lives through learning. This encapsulates our work to build a more digital and sustainable business.

2018 is a pivotal year for Pearson – it is the first in several when Pearson is expected to return to underlying profit growth. The Board is confident management has a good plan to deliver on this guidance and that the strategy is working. Longer term, we are excited about the significant growth opportunities globally and about delivering sustainable long-term growth to drive shareholder value.

Thank you for your ongoing support of Pearson.

Sidney Taurel Chairman

CEO's strategic overview

"We are optimistic about what the future holds and expect to make further progress in 2018."

John Fallon
Chief Executive

Dear shareholders,

In 2017, in a challenging trading environment, we made an adjusted operating profit of £576m – at the top end of our guidance range – and we reported adjusted earnings per share of 54.1p. We continued to invest in the digital transformation and simplification of the company. We have further strengthened our balance sheet, ending the financial year with net debt of £432m. We expect to make further progress in 2018, and over the next three years, we will start growing again, in a sustainable way.

Returns to shareholders

As a result of our strong cash flow generation and proceeds from the further simplification of our portfolio, we launched a £300m share buyback during 2017, which was completed on 16 February 2018, repurchasing a total of 42.8m shares at an average price of 700p. This was accompanied by a significant cut in the dividend. While difficult, this ensures that we can continue to invest in the business to drive long-term growth and a sustainable and progressive dividend going forward. This will enable us to deliver value for our shareholders.

The global opportunity

Globally, there continues to be a tremendous opportunity in education. The estimated global spend is £3.6tn* per year. Currently only 2%* of that spend is on digital but we expect that to grow. But what does digital, look like in effective practice? It means moving to a world of better learning – anywhere, anytime, with real time feedback – driving better outcomes and more meaningful learning experiences.

It means better understanding not just what works, but how it works and in what context. That is what our commitment to efficacy – and reporting on the impact of the use our products on learning outcomes – is about. We made that commitment in 2013 and, as promised, this year we release audited efficacy reports. We are listening to the challenges and opportunities faced by teachers and students, and designing and developing products based on learning and data science – all with a focus on helping them achieve the outcomes that matter most. Technology has changed how, when and where learning takes place. With our scale and resources, brand and commitment to digital, we are in a unique position to make a significant mark on the future of learning.

Put simply, we need to give flexibility to students, arming them with the opportunities to learn in modern, innovative ways, so they have the foundational knowledge and the 21st century skills to not only adapt but succeed.

Our diverse global customer base shares common values of wanting to have more control of their futures in an increasingly uncertain world. We can enable them to do that by helping drive better engagement and by helping learners realise the true economic value of education – and how it helps them make progress. Our focus is on giving the next generation of learners the confidence to be successful no matter what they do. Read more on our approach to creating value for all our stakeholders on p20–21.

It is with this in mind that Pearson is accelerating its move to digital. We are creating products and services to help people teach, learn and grow in new and powerful ways, while fostering a culture of continuous innovation that will ensure we stay relevant over time. Through this transformation, our products will deliver:

- Better learning. Our technology inspires more personalised, flexible and engaging learning that delivers better outcomes
- Anywhere, anytime technology. Our technology gives people the freedom and flexibility they crave, giving them the control over when, where and how they learn
- Real-time feedback. Our innovative online products and services provide real-time personalised feedback so that teachers and faculty can see where they might need to adjust their lessons, and learners can focus where they need to.

This focus on understanding the evolving needs of learners and on innovating to anticipate and meet those needs drives everything we do.

* Source: Citi GPS: Global Perspectives & Solutions, July 2017.

CEO's strategic overview

Our strategy

See *Our strategy*, p13

Our strategy and priorities

Our mission at Pearson is to help people make progress in their lives through learning. To deliver our purpose, we have a vision to be the trusted gateway to lifelong learning.

In order to deliver on this vision, there are three areas of focus:

1. We will grow share through the digital transformation of our courseware and assessment businesses
2. We will invest to build our businesses in structurally growing markets more quickly
3. We will simplify our company to be more efficient and to deliver a much better experience to our customers.

We need to leverage our core strengths in content and assessment powered by services and technology to bring more effective teaching and personalised learning at scale.

Gain share through our digital transformation

This will help us satisfy changing learner consumption preferences and transition our assessment businesses to deliver fewer, smarter tests.

The single biggest opportunity to gain share through our digital transformation is in US higher education courseware, which makes up 28% of product contribution. These profits have declined over the last few years due to the challenges we face in this business, which will continue for the next couple of years.

However, we are making good progress in shifting the business from ownership to 'pay for use', which is a much more viable and sustainable model. We are doing this by ensuring the business is significantly more digital, prioritising access to content over ownership and transacting more product directly to consumers and institutions. Last January, we lowered the price on thousands of eBook rentals, and we also launched a new print rental programme. Our 'Inclusive Access' model gives convenience and better value to students and is a direct-to-institution model that allows students to have materials for their course on day one.

We are building a Global Learning Platform, which is a single, cloud-based platform that's highly scalable and more reliable, and allows us to innovate faster and support a lifelong learning ecosystem for hundreds of millions of learners.

We also know that getting to market more quickly and improving our agility will help us win. To that end, we are making a record level of investment in our business each year – over £700m annually – to drive and scale innovation at Pearson. Some recent examples include:

- Fostering complex skills: using machine learning to improve and accelerate essay grading and student feedback in US higher education courseware
- Personalised pathways: providing adaptive practice and learning in maths and the sciences in US higher education courseware
- Intelligent tutoring: partnering with IBM Watson to embed tutoring dialogue into our courseware products to help students when they need it most
- Natural Language Processing: partnering with Microsoft Research Asia to integrate AI capabilities into English language learning curriculum in China.

CEO's strategic overview

Invest in structural growth markets

Our second strategic priority is to invest in structural market opportunities. That means investing and growing share in our fastest-growing businesses across Pearson, such as:

Professional Certifications (Pearson VUE), which helps more than 450 credential owners across the globe develop, manage, deliver and grow their assessment programmes.

Virtual Schools (Connections Academy), which provides high-quality online education for c.78,000 K-12 students in the US.

English language learning curriculum, instruction and assessment, including our fast-growing Pearson Test of English Academic, the only fully digital test which offers a convenient way for people to demonstrate their English language proficiency as a gateway for other opportunities.

Online Program Management, which helps colleges and universities take their programmes online and improves access for learners who cannot attend a brick-and-mortar school.

Become a simpler and more efficient company

Our third strategic priority is to become a simpler and more efficient company, phasing out dated technologies and systems, eliminating duplication and streamlining operations.

As many of you know, we removed more than £650m in cost between 2013 to 2016. In 2017, we announced our plans to deliver another £300m in cost savings over a three-year period by further simplifying our technology, increasing the use of shared service centres and standardising our processes. This will reduce Pearson's employee base by roughly 3,000 roles but, more importantly, it will improve the way we operate as a company and respond to the needs of a changing educational landscape.

Looking ahead

We are optimistic about what the future holds and expect to make further progress in 2018. At the same time, we know that we will continue to see challenging headwinds in US higher education courseware for the next few years, and we've planned for that. We will offset these headwinds by the broader 70% of Pearson that is stabilising or growing, by creating further cost efficiencies, and by the strength of our cash flow generation and our balance sheet.

It won't be easy, and it will take time. However, I am confident that we will deliver because no other learning company can match our scale, investment and expertise, which includes the incredible, mission-driven talent at Pearson that each day helps people make progress in their lives through learning.

Thank you for your ongoing support of Pearson.

John Fallon
Chief Executive

Future of skills | Employment in 2030

Preparing people for the jobs of the future is core to Pearson's mission of helping people make progress in their lives through learning.

A student entering formal education today will be making decisions about his or her career by the year 2030.

That is why in 2017 Pearson partnered with Nesta and the Oxford Martin School, on a research project designed to advance the conversation about the future of work past fears of automation. Offering the most comprehensive research on this topic to date, it better predicts how major societal and economic trends – and the interactions between them – will affect the future of work, and the skills needed to succeed in the future.

Along with technology, factors such as globalisation and climate change are changing our economy and our labour market. This presents challenges, but also creates an opportunity for real change.

Clearly we need to re-evaluate the skills employers and individuals will need – but we also need to update education systems, better support teachers and create effective new tools to support future teaching and learning. The future will be marked by lifelong learning, and we cannot afford to leave anyone behind.

This research provides an optimistic blueprint for reforming education for the needs of this rapidly changing future.

For Pearson, this is a significant opportunity. Our hope is that employers, education systems and policymakers will collaborate to redesign jobs, retrain individuals and encourage greater skills development in order to make a future economy and world where more people can flourish and make meaningful progress throughout their lives.

Read more: www.futureskills.pearson.com

CEO's strategic overview

Executive team

John Fallon Chief Executive

Coram Williams Chief Financial Officer

Albert Hitchcock Chief Technology & Operations Officer

Anna Vikström Persson Chief Human Resources Officer

Bob Whelan President Pearson Assessments

Bjarne Tellmann General Counsel & Chief Legal Officer

Giovanni Giovannelli President Growth Markets

Jonathan Chocqueel-Mangan Chief Strategy Officer

Kate James Chief Corporate Affairs & Global Marketing Officer

Kevin Capitani President North America

Rod Bristow President UK & Core Markets

Tim Bozik President Global Product

Market trends

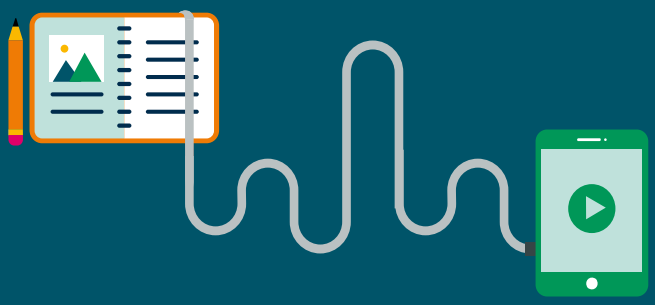
Technology is changing expectations and increasing possibilities in education.

The future of work is about skills not jobs

Much of the conversation about the future of work revolves around fears of technology making workers obsolete. However, when we solely talk about how automation will change the nature of work, we are missing the bigger picture. Rather than jobs disappearing, what is more likely is that the jobs that exist in the future will be broadly recognisable but the skills required to do them will have shifted. To succeed in the future, individuals, employers and education systems need to respond to the notion that while we are not able to control the jobs that will be available, we can prepare people with the skills that will be most valuable for their ongoing success.

Decline of the traditional textbook?

While many students across the world still use traditional textbooks, the rapid pace of technology means that learners increasingly expect to consume educational content in digital format. This is driving rapid advances in accessibility, affordability and a user experience that is immersive, utilising sophisticated technologies designed to help educators increase engagement and produce measurable outcomes for learners.



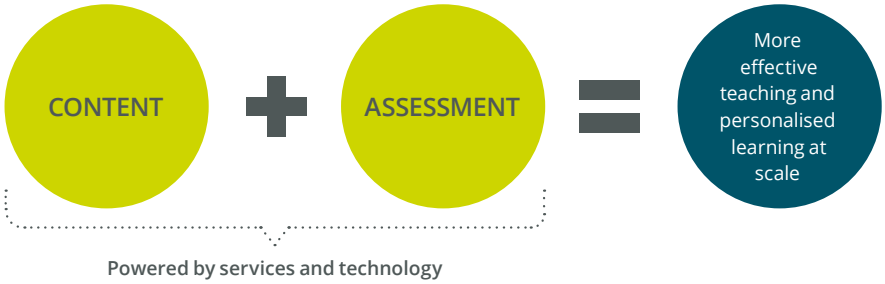
Rise of personalised learning, virtual and augmented reality

Through the move to digital education, these rapid advances in technology are also enabling individual, adaptive learning to take place at scale. The rise of Artificial Intelligence and virtual reality in the classroom, training centres and workplace brings exciting new opportunities for learners, schools, colleges and educators, which will help increase lifelong learning, student engagement and, ultimately, improve learning outcomes.

Our strategy

Our business

We are transforming our business to meet the evolving needs of our customers. We will do that by combining content and assessment powered by services and technology, leading to more effective teaching and personalised learning at scale.



Our strategic priorities

Our strategy is focused on the major growth opportunities – sectors and channels. Our products and services are becoming more personalised, accessible and affordable. And we are becoming leaner and more efficient.

1. Grow market share through digital transformation
2. Invest in structural growth markets
3. Become simpler and more efficient

Efficacy programme see p22

Sustainability plan see p24

Stakeholder value

Our business model and strategy

Better learning. More personalised, flexible and engaging with better outcomes. With anytime, anywhere technology. Giving people the freedom and flexibility they crave, and control over when they learn.

1 Grow market share through digital transformation

Our performance | Our market | Our approach and strengths

US higher education courseware

2017 sales

£1,146m

Percentage of Pearson's total sales

Size of market* c.$7bn

Size of new materials market** $3.5bn

Market position** #1

Underlying market pressures relating to lower enrolment and print attrition to the secondary market persist for the next couple of years, but as we move to an access model and shift to digital we expect pressures to ease and that we will become a more predictable business with greater visibility

* Total student spend: (Pearson estimates)
** Source: MPI

We serve three interrelated customers – students, faculty and administrators. We are meeting the needs of each group by:

- Moving from an ownership to access model
- Selling directly to institutions and B2C channels
- Accelerating digital formats
- Investing in better learning experiences and outcomes.

Core student assessment and qualifications

2017 sales

£256m

Percentage of Pearson's total sales

Size of market c.£700m

Market position #1

Market position in General Qualifications #2

Demographics and demand for qualifications will drive overall growth. After a period of significant curriculum change, we expect greater stability from 2018

We serve students, teachers, schools and government through our qualifications business where we are the awarding body and own the IP (intellectual property). Our strengths include:

- Pioneering digital assessment platforms
- Strong brands built around quality at scale
- Investment in IP and new products.

US student assessment

2017 sales

£355m

Percentage of Pearson's total sales

Size of market $1.2bn

Market position #1

Market share +35%

Stability returning after a period of policy change in recent years, we have continued to invest and are well positioned to grow again:

- Stable market outlook
- Better contract win momentum
- Increased partnering opportunities
- Better margins in digital.

We remain the largest vendor and we have led the shift towards digital testing with our best-in-class platform TestNav.

Our business model and strategy

Our strategic priorities

US higher education courseware

Offering learners more affordable choices and better outcomes will help us take share through expanding our addressable market. We will do this by:

- The exciting pipeline of new products
- The deployment of our new Global Learning Platform to enable faster innovation and scalability
- Investing in services, such as analytics.

Core student assessment and qualifications

- Pioneering a shift to a more digital future, building on innovative online data analytics tool Results Plus, making access to marked exam scripts available online, free to all students, teachers and schools
- Investing in new products and services to drive growth and market share gain.

US student assessment

- Digitally administered tests now account for well over 50% of the total
- Digital lead is allowing us to develop strong partnerships and reduce regulatory risk
- Leading the adoption of artificial intelligence in assessment providing real-time, personalised feedback, supporting teachers to help learners focus on what they need to achieve.

The future of learning

What the future of learning looks like in US higher education courseware – Revel and the Global Learning Platform

Our world is changing. As the nature of work evolves, our solutions must foster the knowledge and skills students need to succeed both in school and in their careers.

Pearson is meeting this challenge head on. We are leveraging the latest technology to provide real-time feedback as students engage in open-ended challenges that foster critical thinking and effective communication.

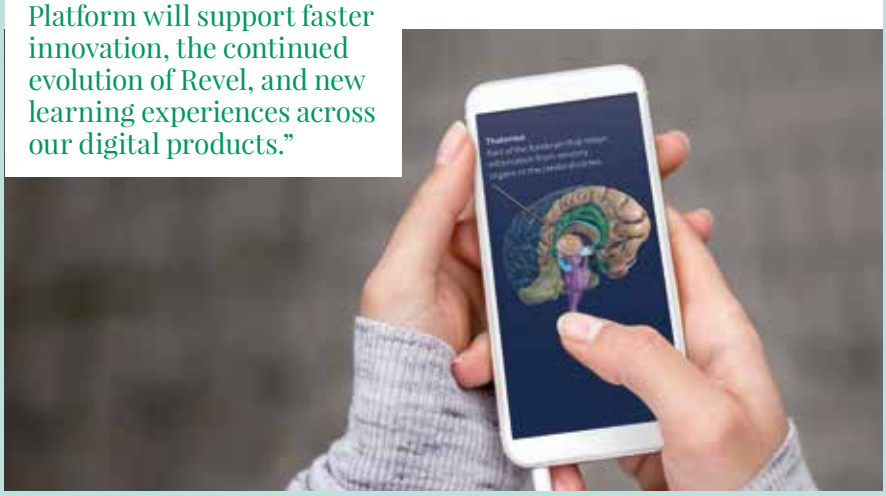
Today, Revel supports engaging learning experiences and activities, including automated essay feedback and scoring. The essay assignments ask students to answer open-ended questions to assess their understanding and communication skills. For selected essay prompts, Revel provides immediate feedback and generates a score for the instructor and students to review in the gradebook.

In the future, the product will offer enhanced automated essay grading and feedback services that leverage the latest developments in Artificial Intelligence, machine learning, and data science. In this way, an AI-based student essay scoring system will learn instructors' grading and feedback patterns and automatically apply them to subsequent essays at scale.

The scoring system will measure both what students say and how they say it, assessing both comprehension and ability to communicate a wider variety of knowledge and skills. Each student will receive personalised feedback on their essay and scores for their instructor's review. Students can then choose to revise their work based on the feedback and resubmit it to their instructor.

The Global Learning Platform will support faster innovation, the continued evolution of Revel, and new learning experiences across our digital products. That will allow us to respond more quickly to students and educators' needs, and deliver a more personalised approach to learning, on an unprecedented worldwide scale.

"The Global Learning Platform will support faster innovation, the continued evolution of Revel, and new learning experiences across our digital products."



Our business model and strategy

2 Invest in structural growth markets

Our performance | Our market | Our approach and strengths

Virtual schools

2017 sales
£274m

Percentage of Pearson's total sales
6%

Size of market
$1.5bn+

Market position
#2

- Total virtual school enrolment in the US is about 330k
- Virtual schools are permitted in 34 states, covering about 80% of K-12 population, including the 'big three' – CA, TX, FL.

A digital business where we offer complete services for charter school partners, support for district programmes and blended offerings. Our strengths include:

- Strong brand, good learning outcomes, high parental satisfaction
- Domain knowledge; end-to-end solution
- Proven partner school model.

Online Program Management and other HE services

2017 sales
£253m

Percentage of Pearson's total sales
5%

Size of market
$1.2bn

Market position
#1

- Market growing at 10%
- Pearson has 40 global partners and runs over 250 programs
- 45 new programs signed and 14 new programs launched in 2017
- Course registration growth of 8%.

The digital promise of "anywhere, anytime learning" opens up one of our biggest structural growth markets:

- Strong brand and track record
- Domain knowledge; end-to-end solution; and can leverage further strengths in content and assessment
- Proven enterprise/undergraduate model
- Multi-programme and multi-discipline approach.

Professional certification

2017 sales
£474m

Percentage of Pearson's total sales
11%

Size of market
$1.2bn

Market position
#1

- Growing market driven by increasing demand for professional credentials and regulatory change.

We are the largest vendor in this market and have built our brand through:

- Security and reliability
- Leading digital platforms
- Global network of 20,000 testing centres.

English

2017 sales
£305m*

Percentage of Pearson's total sales
7%

Size of market
$5bn+

Market position in English courseware
#2

Market position in English assessment
#3

- 1.7bn English speakers globally, expected to be 2bn by 2020
- A growing opportunity – ELT courseware, assessment, PTE-Academic and adult school franchises.

- Better customer experience/outcomes
- Embedded in-course assessment and analytics
- Alignment to Global Scale of English consistency and scale.

* excluding WSE

Our business model and strategy

Our strategic priorities

Virtual schools
- Expand the addressable market with new partner schools
- Scale up in existing states while continuing to take market share.

Online Program Management and other HE services
- Strong pipeline of investment for longer-term growth
- Expansion of enterprise/ undergraduate models, global growth and employer education.

Professional certification
- Near-term growth from US MCAT
- Long-term growth through leveraging operational excellence and expertise.

English
- Grow English courseware with new product pipeline that leverages strength in content and assessment
- Grow PTE-Academic, our leading digital test that gives faster, more accurate results
- Use insights from our direct delivery businesses in China to power a wide range of partners, deploying our brands, content, assessment and ability to scale online.

The future of learning 〉 Virtual schools 〉 Connections Academy

We are currently the number two player in virtual schooling in the US, but are growing more rapidly and have a strong reputation in the market.

We are aiming to build share by deepening existing relationships, accelerating the opening of new schools and investing to drive greater efficacy through our product offering.

Our model is proven, our results are strong academically and we have a powerful brand which is highly regarded by parents and educators alike.

Learner story 〉 Alex LeViness 〉 Ohio Connections Academy (OCA) virtual school graduate

In a letter to The Columbus Dispatch, Alex wrote:

"I enrolled in the online charter school before my junior year because I had a very difficult experience in my previous school. I had grown to hate everything about school (especially my math courses) and I didn't care if I finished high school. College wasn't even a consideration. Once I started at OCA, I discovered I could learn at my own pace and my teachers motivated me to dive deeper into subjects that interested me. Along the way, I started to love studying and learning and I even found that I actually liked science... I really don't think that I would be anywhere close to where I am today if I hadn't had the opportunity to attend Ohio Connections Academy... I wish to thank all my teachers and counselors at OCA who worked with me and inspired me. They really changed my life at a time when I thought education was pointless."

Alex recently graduated from the University of Alabama and plans to travel to Germany to conduct research as part of her Fulbright Scholarship to the Max Planck Institute for Plasma Physics, and then to begin her Ph.D. programme in physics at Princeton University.

"I started to love studying and learning and I even found that I actually liked science... I really don't think that I would be anywhere close to where I am today if I hadn't had the opportunity to attend Ohio Connections Academy..."

Our business model and strategy

3 Become simpler and more efficient

2013 ← c.£650m of cost savings[1] → **2016**

Focus areas

- Centralising functions for a simpler and leaner organisation
- Commence roll-out of single global Enterprise Resource Planning software

2017 ← c.£300m of cost savings[2] → **2020**

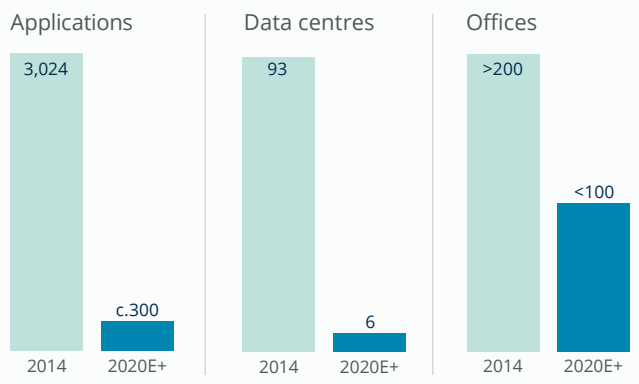
Focus areas

- Further simplification through shared services centres
- Leaner organisations through reduction in headcount
- Reduction in number of legacy applications, data centres and office locations
- Complete roll-out of global Enterprise Resource Planning

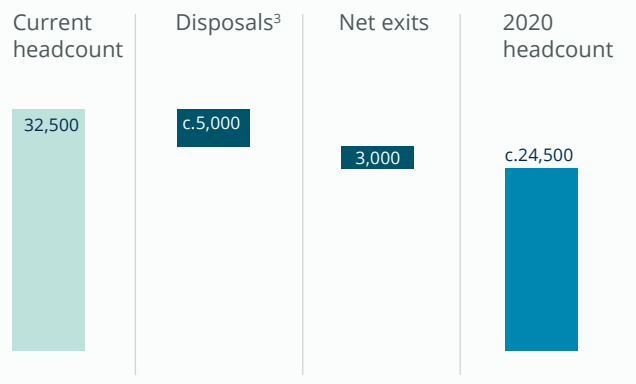
Recent activity

- US K-12 courseware Held-For-Sale in 2018
- Exited WSE, GEDU, Utel, smaller businesses in 2017

Infrastructure simplification



Headcount reduction



Our competitive advantage

Record level of investment

Pearson's strong balance sheet underpins the continuing investment in our digital transformation and structural growth markets. We are investing over £700m a year to become the winners in digital education.

Global player

We have a truly global scale and focus. We operate in over 70 markets worldwide. Our products and services benefit from being centrally developed, globally deployed with local expertise and capabilities ensuring success.

Move to digital

Pearson's products and services are becoming more digital and personalised, offering more affordable choices for students with better learning outcomes. This is building a more sustainable and profitable business with a more visible and predictable revenue profile, based around access not ownership models.

Common platforms

Our products and services are increasingly being delivered across common platforms, enabling a leaner Pearson, driving significant revenue and cost synergies.

Market leader

Our competitive position is strong and we occupy either number one or number two positions in all our major markets. We are focused on gaining share through our digital transformation and building sustainable, leading positions in our structural growth markets.

1 Calculated at year end 2016 exchange rates.
2 Phased plan first presented on August 4 2017, based on December 2016 FX rates. Note: A significant part of these costs and savings are in US Dollar and other non-Sterling currencies and so subject to FX movements over the implementation timeframe.
3 Not including US K-12 courseware.

Our business model and strategy

Helping create the future of learning

An interview with Cedrick Collomb, Senior Vice President for Global Product Technology

What excites you most about the work you do at Pearson?

CC

What excites me the most about working for Pearson is how we are using technology to revolutionise and drastically transform education. Our customers and learners are at the heart of everything that we do, and we are bringing them the best – and most advanced – technologies so that they have engaging, highly interactive experiences with our products. Leveraging the latest technologies such as artificial intelligence, machine learning, augmented reality, virtual reality, advanced real-time rendering, simulation, to name a few, will enable this experience, and ultimately improve their learning outcomes.

What is your main goal for 2018?

CC

This year, we are shaping the future of education by bringing our Global Learning Platform technology to life through next-generation software. The platform will enable us to deliver unparalleled learning experiences to our customers and learners around the world.

How are you helping Pearson in its transition to digital?

CC

Pearson's digital transformation isn't just taking our legacy products and making them digital, it is much more than that. Every aspect of the company is undergoing transformation; how we operate, our processes, how our teams work, how we build and deliver, it's everything. In building the Global Learning Platform, our teams have been laser focused on using the best data to learn as much as we can about our customers' behaviour and what we as a company need to do in order to give them world-class learning experiences.

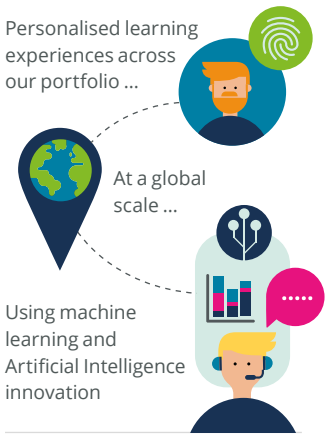
What is your biggest win at Pearson to date?

CC

Personally, I have enjoyed sharing the developments of the Global Learning Platform with our employees, especially the first-look demo which brought the idea of the Global Learning Platform to life and showed the promise of profound educational changes. Transforming education as we know it today is no easy feat, and I am humbled to be the leader of an exceptionally high-performing team, who collectively have delivered – and continue to deliver – so that we deliver on Pearson's mission. The team are not only building next-generation products and software, but are also serving our current customer base by ensuring all of the products across our portfolio are stable, reliable and deliver a quality experience for our customers.

Global Learning Platform *in one minute*

Over time, all of Pearson's products will be brought onto a single platform which **will allow us to deliver:**



GLP products will:

- be highly scalable and more reliable, speeding up innovation
- support customer and third party integration
- be a foundation for a lifelong learning ecosystem

"Pearson's digital transformation isn't just taking our legacy products and making them digital... every aspect of the company is undergoing transformation."

CC **Cedrick Collomb**
Senior Vice President for Global Product Technology

Our business model and strategy

Value created for our stakeholders

Our strategy is driven by the belief that education is evolving to meet the demands of today's learners, and we are a driving force behind that change. This will enable us to create long-term, sustainable value for our shareholders, customers, partners and learners across the world.

Educators

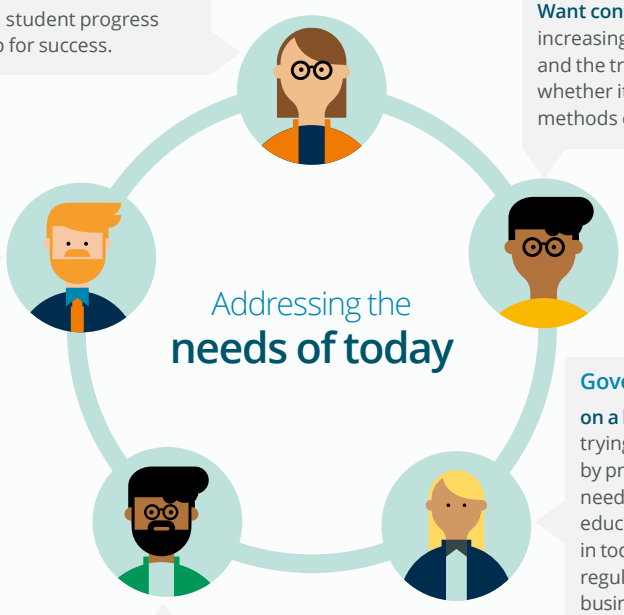
want more engaging ways to connect with their students and better and more timely feedback on student progress to help set them up for success.

Learners

Want control over their education and are increasingly questioning the value of an education, and the traditional trappings of institutions – whether it is courseware, outdated teaching methods or brick-and-mortar institutions.

Industry

is looking for the educational system to help drive growth and innovation by graduating students from high school prepared for college or a career, and for higher education to become more accessible and affordable. A strong education system is crucial to preparing people for prosperous employment and successful lifelong learning.



Government

on a local, state, federal and national level are trying to address inequities in the growing skills gap, by providing education systems attuned to the needs of the workforce and designed to deliver the education and training individuals need to prosper in today's labour market. Governments and regulators also set policy to ensure that both businesses and consumers are provided with the most effective legislative frameworks that help drive sustainable growth.

Administrators

in a cost-conscious environment, aim to deliver innovative and high-quality experiences that set students on a course to become prosperous lifelong learners.

Value for our customers

No one can predict with certainty what the future of learning will look like, but we know that technology has enabled autonomy and customisation for the individual. Education, without a doubt, has to follow suit. Not all students, educators and institutions are the same; they each have to choose what is most likely to make them successful.

Building skills around lifelong learning, agility and innovation will give the next generation of learners the confidence to be successful, no matter what they do. We offer traditional tools and methods and continually innovate so that learners are given the power to choose what, how, when and where they learn.

Our business model and strategy

For our partners and suppliers:

Building successful business partnerships across the education ecosystem to build joint success and growth.

For our customers:

Building a truly customer-centric operating model based on effective use of data to drive strategic insights.

Channel partners:

Help ensure learners have the course materials they need to succeed in their studies.

For governments:

Building strong political and institutional relationships to support our stakeholders. We are committed to aligning our agendas – we provide counsel and share our knowledge on the future trends in global education; we create opportunities for private-public partnerships.

For our learners:

Developing an innovative technology platform to support and enable lifelong learning, focusing on achieving better learning outcomes.

For our authors:

Share their passion for teaching and research to bring new skills and concepts to life for learners.

For our employees:

Creating a healthier company, with clear expectations, sufficient resources, supportive relationships and clear accountability to deliver a very ambitious programme of change and transformation.

Our approach to value creation

We are developing new organisational capabilities to create value for all our stakeholders while keeping our learners at the heart of everything we do. Our culture will enable sustained success, capturing external ideas, fostering top-down innovation and driving business partnerships and collaboration.

Value for our shareholders:

This will ultimately help us achieve long-term sustainable growth for all our company shareholders.

Please see the stakeholder engagement section of the Governance report for more on how we build strong relationships with our diverse range of stakeholders on p88–89

Efficacy

We made a commitment in 2013 to report annually on the impact of use of our products on outcomes, and to externally audit the reports by 2018. From 2014–2016, we shared preliminary efficacy findings; this year we are proud to publish our first set of audited efficacy reports, certified by PricewaterhouseCoopers. Collectively these reports are representative of products impacting the lives of 18m learners. We are proud to be the only learning company committed to efficacy with such rigour and at such scale.

What we did and what we have learned

When we launched our commitment to report on the efficacy of our products, we aspired to have impact in three areas:

- evidencing that our in-market products improve the outcomes that matter most to customers and learners;
- supporting evidence-based product innovation; and
- galvanising the education sector and all learning companies to measure their impact by the outcomes they deliver for learners.

Over the past four years, working across all of Pearson's major digital product portfolios, we embedded efficacy and research across product development in both early-stage product strategy, design and development, and later stage product improvement. For the majority of our in-market digital supplemental products, we have evidence that there are statistically significant relationships between the use of our products and student achievement.

Learning

In order to understand where, when, how, why and for whom our products are effective, we focus on defining and collecting evidence of impact on the outcomes that matter most to our customers and learners, including access and engagement, competency and skill, achievement and progression.

We have evidence that there are statistically significant relationships between the use of many of our digital products and course achievement outcomes. However, the efficacy of a digital product cannot be separated from the way that product is implemented, or the context in which it is used. Who is using the product – what their prior knowledge and experience is, implementation – the way a product is integrated into teaching and learning – and product alignment – the way that the features of a product are designed, aligned and used to support the achievement of learning goals – all have a significant impact on the outcomes that can be achieved.

The more we can engage with our customers to better understand the outcomes that matter most to them; select products that have features that can support the delivery of those outcomes; and share best practices about how learning technologies can be integrated into their teaching, the more likely they will be to achieve their desired outcomes.

Product innovation

Our efficacy research to date has focused on measuring the impact of the use of digital supplemental products on course achievement goals. We have used what we have learned about our in-market products to make incremental improvements to existing products as well as to support new product innovation.

In parallel, we are further driving more evidence based approaches to product development by applying evidence about what works from the learning and data sciences to the design, development and ongoing improvement of products. We are focusing on helping learners develop the knowledge and the skills they need to be successful in the future.

As we progress with the development of fully digital learning experiences, we expect that the combination of these elements – paired with implementation support for our customers – will enable an even greater impact on learning.

Education sector

In 2013, Pearson was the first learning company to make a public commitment to reporting on the impact of use of our products on outcomes. Since then, both our traditional and non-traditional competitors have announced similar efforts. Today, we remain the only learning company in the world that is subjecting its efficacy statements to external audit and peer review. Put simply, we are the only company that has made a public, evidence-based commitment to helping more learners learn more.

https://www.pearson.com/corporate/efficacy-and-research.html

Connections

In 2017 we took a critical lens to better understand the efficacy of Connections Academy. This work was intended to help us evaluate how we are educating young people through our virtual schools. Through three different methodological approaches, we sought to better understand the students we serve, as well as their performance at Connections Academy relative to peers in brick and mortar schools with similar populations.

Our research confirms that our virtual schools serve a diverse and unique student body with some of the highest mobility rates in the United States. When we adjust for this student mobility and control for prior student achievement, our studies found that the academic performance of Connections students is comparable to that of students in brick and mortar schools.

We look forward to sharing this research with the virtual schools sector to help inform the discourse around virtual schools, so that students and families who may benefit from such learning environments have the opportunity to do so.

Efficacy

Helping create the future of learning

An interview with Kate Edwards, Senior Vice President Efficacy & Research

> "In 2018, we will be the first learning company in the world to undertake, and release, non-financial reporting on the impact of use of our products on outcomes for learners."

What excites you most about the work you do at Pearson?

KE

Working for a business that seeks to combine commercial growth with impact on learning. For me this is all about understanding the greatest learning-related challenges and needs our customers and learners have now, and will have in the future, and then applying outcomes-focused, evidence-based design to our solutions. This is what keeps me up at night (in a good way!) and what gets me up in the morning.

What are your main goals for 2018?

KE

At the company level, our efficacy & research goal is to continue to improve our impact on learning outcomes. In 2018, we will be doing this by:

1. Developing evidence-based products, applying efficacy improvement activities and undertaking efficacy reporting
2. Using efficacy & research more frequently to help our colleagues have learner-led conversations with our customers
3. Developing the efficacy & research skills and expertise of our people
4. Actively participating in external conversations on efficacy & research

In particular, we want to apply this work to informing the design of products that develop the skills needed for both work and life in the future.

How are you helping Pearson in its transition to digital?

KE

I'm passionate about the role we need to play in exploring and explaining three things in digital teaching and learning: the role of the educator, the role of the student and the role of the technology.

What is the most important milestone Pearson has reached from an efficacy & research perspective to date?

KE

The most important milestone, to date, is yet to come. We will reach it at the end of March 2018 when we release our 2018 Efficacy Reports. We will be the first learning company in the world to undertake, and release, non-financial reporting on the impact of use of our products on outcomes for learners. External reporting and auditing for the first time is an important milestone for Pearson and efficacy. However, the ongoing commitment to external reporting is a means to an end: the primary goal being for Pearson to use evidence about how to improve learning to develop and sell best-in-class products and services.

Sustainability

Sustainability is integral to our company strategy. This is no accident as commercial success cannot be separated from ethical and sustainable business practice. It is fundamental to achieving our mission to help people progress in their lives through learning.

Two years ago, Pearson adopted its 2020 sustainability plan. It provides a framework for the business to focus on the most important ways we can contribute to solving some of the world's greatest social and environmental challenges, while helping to grow and strengthen our business at the same time. By setting a vision to integrate sustainability into every aspect of the company, the plan continues to guide us as we deliver on our business strategy.

The plan was designed to reflect the United Nations Sustainable Development Goals (SDGs), which together point towards a more equitable, ethical and environmentally sustainable world. Of the 17 SDGs, we have prioritised Goal 4 on quality education, Goal 8 on decent work and economic growth and Goal 10 on reducing inequalities. Quality education is both one of the goals but also a factor underpinning success across all the goals. As such, a stronger and more sustainable Pearson in turn will allow us to help more people progress.

Sustainability Plan

Our 2020 Sustainability Plan is designed to create value for our learners, shareholders and society. It is built around three pillars:

1. Be a trusted partner
2. Reach more learners
3. Shape the future of learning.

More information on our performance will be available later this year when we publish our 2017 Sustainability Report. In this section, we:

- Set out the key material issues for the company and how these relate to our risk management process
- Outline how sustainability is governed at Pearson
- Report on highlights from each of the three pillars.

Our material issues

Our 2020 Sustainability Plan is informed by our material issues – those most relevant to the sustainability of the business. They were identified following consultation with senior leaders and employees, external experts and stakeholders, and a review and benchmark of current policies and priorities. We then further prioritised nine key issues.

These issues represent both opportunities for growth as well as risks to revenue. We continue to map these sustainability issues against our enterprise risk management process. As part of our risk management process, company-wide risks are tracked across geographies and functions.

See *Our material issues* matrix p26

Sustainability governance

The Reputation & Responsibility Committee, a formal committee of the Board, provides ongoing oversight, scrutiny and challenge on both matters relating to our sustainability strategy and our corporate reputation. Learn more on p86.

The Pearson Executive drives implementation of business strategy, including responding to our sustainability issues. The Responsible Business Leadership Council oversees the development of the strategy on behalf of the Board. It is chaired by our Chief Corporate Affairs & Global Marketing Officer and comprises senior leaders from across the business.

Sustainability

Sustainability plan

Building a sustainable business is critical to achieving our mission and ensuring our long-term competitiveness. Our customers, employees, partners and learners expect us to uphold the highest business standards, to continuously enhance the quality of our products and to contribute to their communities.

To help achieve this, we have three sustainability pillars:

1 Be a trusted partner

- Deliver high-quality products and services
- Respect human rights
- Develop our people and communities
- Protect our natural environment
- Build a sustainable supply chain
- Ensure strong governance

2 Reach more learners

- Improve access to and affordability of products and services
- Collaborate to reach underserved learners

3 Shape the future of education

- Leverage technology for equitable learning outcomes
- Build skills that foster employability and inclusive economic growth
- Promote education for sustainable development
- Contribute to global research, dialogue and collective action on quality education

Our plan aligns with the United Nations SDGs creating better outcomes for customers and society, and stronger financial returns for shareholders.

4 – Quality education

8 – Decent work and economic growth

10 – Reduced inequalities

1 Be a trusted partner

Pearson has a set of commitments that together define responsible business for us. These are to:

- Ensure that our products and services are inclusive, appropriate in content to the age, location and ability of the learner and are easy and safe to use and access
- Respect and progress our employees and provide opportunities for them to get involved in their local communities
- Respect human rights, including protecting data entrusted to us by learners and our customers. More information on our approach to data privacy and security can be found in the Principal Risks section (p58)
- Extend our commitments on human rights and environmental responsibility to include our suppliers, franchisees and other business partners
- Deliver against our targets to make more efficient use of resources and on our response to climate change.

Deliver high-quality products and services

Learners trust and depend on Pearson to provide course materials that are relevant, appropriate, inclusive, safe and work well. Our primary responsibility to learners is through the products and services we sell and how we extend our reach. Our section on Efficacy (p22) describes the progress we have made in ensuring our products have their intended learning outcomes.

A focus area last year was the development and release of a new global editorial policy designed to ensure we consistently publish high-quality content and prevent errors or offensive content. The policy is global in scope and builds upon both existing editorial principles in operation today across our business as well as a review of external guidelines.

This work was happening at the same time as the discovery of inappropriate material in our Concepts in Nursing series of textbooks. We took immediate action – issuing a public apology, removing the offensive material and offering a free replacement copy to students who requested a reprinted copy.

We now have more work to do, and work will begin on training on the new policy early in 2018. This is a first step ahead of policy due diligence. We are also starting work in partnership with Stonewall on developing guidelines for our UK Schools business on how we can make our products more LGBT inclusive.

Respect and progress our employees

Our commitments to our people as a responsible employer are to:

- Inform, support and equip colleagues to work collaboratively
- Encourage and reward high performance, nurturing talent and creating a culture where all are able to realise their individual potential
- Provide a safe and healthy work environment for our employees and the learners we serve. See the Principal Risks section on p54 for more detail on how we manage this issue
- Help our employees understand how we are doing as a company, including how world and sector trends might affect them.

Sustainability

Our material issues

Materiality matrix

The following matrix shows how we mapped our 19 issues, and highlights the nine that we have deemed to be the most material for the purpose of our sustainability strategy.

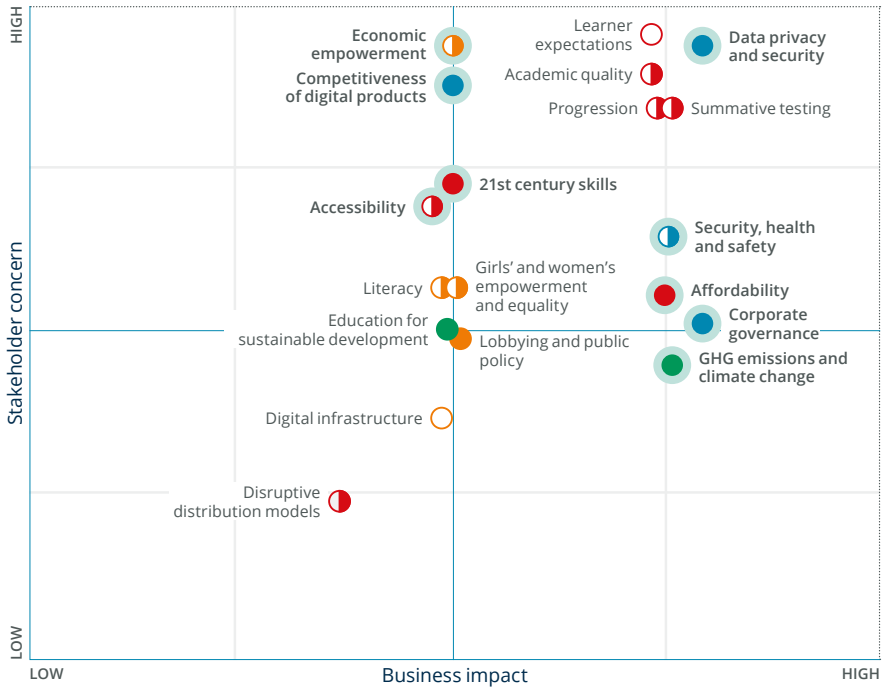
We will evaluate, refine and talk with stakeholders about our material issues on an ongoing basis, in the spirit of continuous iteration and improvement.

Key to material issues

- Nine material issues in our sustainability plan and reporting
- Corporate functions
- Societal issues
- Education industry
- Environmental issues

Degree of control

High · Medium · Low



Alignment of material issues to principal and other Pearson risks

Sustainability report 2016 Material issues	Annual report 2017 Principal risk	Company-wide risk	Business area risk monitoring		
Disruptive distribution models	2	YES	› Global Product › Core › Growth › North America › Environmental, Social & Governance		
Competitiveness of digital products	2				
Affordability	2				
Learner expectations	2				
Academic quality	2				
Summative testing	5	YES	› Assessment	› Core	
Lobbying and public policy	4	YES	› Core › Growth	› North America › Assessment	
Data privacy and security	12	YES	› Global Product › Core › Growth	› North America › Assessment	› Legal › Tech & Ops
Digital infrastructure	8	YES	› Global Product	› North America	› Tech & Ops
Security, health and safety	6 7	YES	› Core › Growth › HR	› Assessment › Environmental, Social & Governance	› Tech & Ops
Accessibility*	–	–	› Assessment	› Legal	› Environmental, Social & Governance
GHG emissions and climate change	–	–	› Environmental, Social & Governance		

* Emerging risk

See *Principal risks and uncertainties*, p50

Sustainability

Pearson continues to manage considerable amounts of change both within the business and outside it. We have introduced new business models as well as continued our investment programme in new platforms and products to help us simplify and standardise how we work.

During 2017, we announced additional plans to achieve annualised cost savings of £300m by 2020, including a target to reduce the total Pearson team by 3,000. We continue to provide comprehensive information on the trends behind these plans, regular communication with extra detail on the process for affected teams and consultation as well as support for colleagues leaving the company.

Culture, mission and values

Our values – to be brave, imaginative, decent and accountable – continue to guide us in implementing our strategy. They are embedded into our performance assessment, which means all employees are evaluated on and rewarded for acting consistently with them.

The Pearson Code of Conduct underpins our values by setting out the ethical, social and environmental standards of behaviour we expect from employees, and we have a companion code for business partners.

The Code was refreshed and last circulated in September 2017. We make sure everyone in Pearson is aware of the Code and confirms they understand and will comply with it. Agreeing to the Code is a mandatory part of the on-boarding process for all new Pearson employees. We have achieved our target of 100% of employees having signed up to the Code.

Many of the areas covered by the Code are supported by detailed policies and procedures. For example, anti-bribery & corruption, health & safety & safeguarding. Learn more about these issues in our section on Principal Risks (p54–55).

Employee engagement survey

Employee engagement remains a consistent priority as we navigate changes to our business. Last year, each member of the Pearson Executive Management team committed to respond to the key themes highlighted in our 2016 Employee Engagement Survey. Each Executive developed a plan with progress monitored quarterly. Highlights from those plans:

Aspect	Issue	Response
Career Development and Mentoring	More information for employees on how to progress their careers at Pearson	Over 1,500 employees participated in Career Development Workshops across 111 sessions in 27 locations in 23 countries. Over 100 mentoring relationships have been established.
Company Strategy	To do more to communicate on our products and reporting on progress	We introduced Discovery Days – forums to engage employees on our strategy, products and brand and provide workshops to gain new skills. 24 Discovery Days were held in 2017 in 14 countries. Since 2016, 24% of Pearson employees have attended a Discovery Day.
Learning and Development	More opportunity to develop functional and management skills	Academies were launched on Technology, Product, Sales and Finance to strengthen expertise and career development. We introduced Workforce 2020 capabilities defining who we are, how we act and what we do. These provide guidance on the capabilities Pearson expects. We launched our Leadership Academy, delivering what leadership looks like at all levels in the organisation. The Academy offers a range of programmes, resources and support. It includes a pilot of a new Manager Fundamentals training programme to help prepare new managers for success. All of the above are available through Pearson U and open to all employees. In 2017, 25,725 employees took at least one course in Pearson U.

During 2017, we followed up by asking 1,700 Pearson leaders to take an organisational health survey to help us understand areas where we could further boost performance. Key findings include the following:

Aspect:	Action taken:
Being clear on our strategy	Set our three strategic priorities, published a company-wide performance dashboard, appointed a new Chief Strategy Officer and been clear on our priorities as part of our brand focus
Accountability and ownership	Have been more explicit on expectations of individuals to collaborate and deliver against the strategy
Innovation and partnership	Invested in new platforms and partnerships
Insight	Created a global research and insight function
Operational excellence	Accelerated the investment in centres of excellence, driving efficiency through investment in technology
Diversity and inclusion	Established a new committee and global team to help us better reflect the communities we serve

Sustainability

Working with the 30% Club on women's mentorship and empowerment

To support Pearson's commitment to progressing women within our organisation and supporting women in leadership, we joined forces with the 30% Club on a mentorship programme in the UK.

The 30% Club is dedicated to bringing the percentage of women on Boards and in executive management up to 30%. Expanding mentorship for women is a key part of reaching that goal.

Our Women in Learning and Leadership (WILL) group in the UK worked with the 30% Club to facilitate a cross-company mentorship for talented mid-career Pearson women via a scheme that began four years ago.

At a 2017 award ceremony, the 30% Club named Pearson 'Dynamic Mentoring Organisation of the Year' for our work around expanding diversity and inclusion; for developing events and services to harness the power of mentoring; and for supporting mentors and mentees to make time for meetings and fully embrace the value of mentoring. In the same award ceremony, Pearson employee Carol Hill was awarded Committed Mentee of the Year Runner Up.

"Being a mentee in the 30% Club scheme has been an amazing experience for me. I was paired with a mentor from the banking industry who acted as an unbiased sounding board for me as I tried to work my way through my career goals."

Carol Hill, Director of Global Product Lifecycle Implementation at Pearson

We operate a free, independent, confidential telephone helpline and website available to anyone who wants to raise a concern. We have a clear non-retaliation policy in place to encourage people to share the issues they have and we ask about how comfortable people are in raising concerns in our employee engagement survey. In 2017, we had 87 concerns (107 in 2016), which were investigated and, where possible, the outcome shared with the whistleblower. As in previous years, the majority of the concerns related to HR practices. Material concerns are reported to the Pearson Audit Committee.

Diversity, equality and inclusion

At Pearson, we value the power of our differences. Our global Diversity & Inclusion (D&I) programme aims to build a better, stronger company for our employees, our learners and the communities we serve.

Our commitment is to aspire to maintain a work environment that's inclusive as well as diverse, in which our people can be themselves. And we are building a culture of innovation and learning where every idea and perspective is valued, so that our products reflect the people we serve – our teachers and learners.

Highlights of our activity include:

- Expansion of the new global D&I team and appointment of a senior leadership role to drive the agenda.
- Establishment of a new Executive level committee led by the General Counsel and Chief Legal Officer to provide strategic oversight.
- Around 2,400 employees get involved in our eight global employee resource networks. The networks are for women, parents, veterans, Latinos, the LGBT community, generational differences, people with disabilities and employees of black and/or African ancestry.
- Reached more than 6m people through initiatives such as our #DiscussDiversity Twitter chats
- Over 2,400 people completed D&I related training courses
- For a fifth year, achieved a perfect score of 100% in the 2017 Corporate Equality Index run by LGBT advocacy group the Human Rights Campaign.

Respect human rights

In 2017, Pearson undertook a review of its approach to human rights. Drawing on the expertise of BSR (Business for Social Responsibility), we considered how our operations, products and services, as well as the activities of our business partners, may have a positive or negative impact. The work considered the rights of learners, parents, employees and contractors, teachers and educators, customers, supply chain workers and the broader community.

Pearson also looked at how its policies seek to respect human rights standards defined by internationally agreed principles: the International Bill of Human Rights; the International Labour Organization Declaration on Fundamental Principles and Rights at Work; and the United Nations Guiding Principles on Business and Human Rights.

As a result of the human rights review, we have identified priority human rights risks and opportunities and have developed a roadmap to address them. For more, see the section on compliance in Principal Risks on p59.

Our Business Partner Code of Conduct sets out our requirements of third parties and, as part of our global approach to procurement, we include specific obligations relating to human rights compliance in new and renewed supplier agreements. We audit suppliers in high-risk categories in our book printing supply chain.

A concern across the value chain is for ensuring our activities are free from slavery, servitude, forced or compulsory labour and human trafficking. A statement on the steps taken by Pearson to combat modern slavery was approved by the Board and can be viewed on the Pearson website (www.pearson.com).

As a result of our review on human rights, we have identified relevant areas of risk and opportunity for Pearson. These include providing a safe and inclusive environment for learners, employees and contractors as well as analysing how technology and partnerships impact on rights. We do not currently have an overarching human rights policy, although we intend to introduce one in 2018. We do have policies in place for key elements of human rights including editorial content, health & safety, safeguarding and data privacy.

Sustainability

Protect our natural environment

Climate change remains a focus for us as one of the most serious issues facing the planet and GHG emissions is one of our material sustainability issues.

Minimising our environmental impact is not just the right thing to do; it helps deliver cost savings.

The environmental impact of our directly controlled operations – our buildings and business travel – is low. Our single most significant impact area is energy use and this accounts for less than 1% of our supply chain cost. As such, environmental risk has been considered and does not feature as a Principal Risk for the company.

Nevertheless, good environmental stewardship by companies is expected by stakeholders. This is why GHG emissions was identified as a material sustainability issue for the company.

We maintained our climate neutral status for our directly controlled operations – a commitment first introduced in 2009. Our strategy is for:

- Reduction: A 50% reduction in operational emissions as at the end of 2017 compared with a 2009 base year.
- Renewables: We maintained our record of purchasing 100% of the electricity we use from renewable sources and generate our own renewable electricity at five of our sites.
- Offset: Since 2009, we have now protected over 1,600 hectares of forest. One of our offset providers – the Woodland Trust – has also again provided offsets equivalent to those generated by the printing of this report.

Pearson has had an environment policy in place since 1992. We remain certified against the Carbon Trust Standard for our global operations and were the second ever organisation to secure the standard which recognises leadership in measuring, managing and reducing year-on-year carbon emissions. We also continue to be certified against ISO 14001, the environmental management standard in the UK and Australia. This standard incorporates both internal and external audit.

The Task Force on Climate-related Financial Disclosures has published recommendations for voluntary, consistent climate-related financial risk disclosures for use by companies. The biggest impact on the environment for Pearson is in its supply chain through the purchase of paper and the associated carbon emissions. During 2018, we will consider the extent to which Pearson should amend its disclosures in light of the taskforce recommendations.

On paper, our focus is on sustainability of supply, being efficient in how we use paper and on promoting responsible forest management. We:

- Have a policy on environmental sourcing of paper
- Discuss our approach with suppliers, customers, environmental groups and investors
- Are active members of industry bodies dedicated to responsible forest management
- Hold Forest Stewardship Council (FSC) chain of custody in the UK as does LSC Communication, our outsource partner in North America, allowing books in those markets to carry the FSC label.

We will publish full details of our environmental performance including other materially important emissions such as water use and embedded carbon dioxide in purchased raw materials in our 2017 Environment Report.

Key performance indicators *Gender diversity*

Women in Pearson %

Pearson works hard to create an environment where women have the opportunity to build careers in all functions and at all management levels of the organisation.

At Board level, 30% of our members were female as at the end of 2017. As a founder member of the 30% Club, we remain committed to the target of a minimum of 30% representation of women on the Board.

	2015	2016	2017
Board of Directors	33%	30%	**30%**
Senior leadership*	34%	32%	**30%**
All employees	59%	60%	**61%**

* Two reporting lines from the Chief Executive.

Over the last two years, we have seen a fall in the proportion of women at senior leadership level. To help reverse this, we will increase our focus and investment in diversity for 2018. Our CEO has recently become a signatory to the latest 30% Club challenge to reach and maintain a minimum of 30% representation of women in senior leadership.

In the UK, the government has introduced new regulations designed to help address the gender pay gap. Pearson has provided information on its gender pay gap in the UK and has made a commitment to extend our reporting globally by 2020.

Key performance indicators *Global Greenhouse Gas emissions data*

Metric tonnes of CO_2e

Emissions from	2015	2016	2017
Combustion of fuel and operation of facilities (GHG Protocol Scope 1)	22,343	19,093	**15,691**
Electricity (GHG Protocol Scope 2)	88,831	77,579	**61,047**
Emissions relating to air and rail travel, electricity transmission, waste and water (GHG Protocol scope 3)	35,644	29,714	**27,646**
Total	**146,368**	**126,386**	**104,384**
Intensity ratios	**2015**	**2016**	**2017**
Scope 1 and 2/sales revenue	24.8	21.2	**17**
Scope 1 and 2/FTE	2.7	2.95	**2.53**

Methodology: We have reported on all of the emission sources required under the Companies Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. These sources fall within our consolidated financial statement. We do not have responsibility for any emission sources that are not included in our consolidated statement. The method we have used to calculate GHG emissions is the GHG Protocol Corporate Accounting and Reporting Standard (revised edition), using the location-based scope 2 calculation method, together with the latest emission factors from recognised public sources, including, but not limited to, the UK Department for Business Energy & Industrial Strategy, the International Energy Agency, the US Energy Information Administration, the US Environmental Protection Agency and the Intergovernmental Panel on Climate Change. The data in the table above has been independently verified by Corporate Citizenship.

Sustainability

2 Reach more learners

Reaching more learners is integral to both our business goals and our sustainability strategy. Through growing our business, we can both achieve our financial targets and help more people to progress through learning. The commitments we make are designed to contribute to a quality education for all, decent jobs and equality:

- Expand access to education and make learning more affordable for people everywhere, including the most disadvantaged groups
- Harness the power of new technologies to bring education and opportunities to more people in more places
- Work together with charities, teachers, education experts, governments and others to tackle some of the biggest education challenges related to gender inequality, conflicts and emergencies, and illiteracy.

We are taking steps to tackle some of the barriers underserved learners face, such as geographic, cultural or socioeconomic obstacles, or personal constraints, such as the need to balance education with work and family responsibilities.

For example, products like Revel (our next-generation US higher education courseware product) help students learn in smaller, bite-sized chunks and shorter time periods, so they are able to carve out a few minutes from their busy days or make use of transition times like commuting when they would not otherwise be able to study. Personalised, adaptive solutions in products like MyLab can identify students who are behind and help them stay on track. Our inclusive access subscription model helps students to access their materials at a lower price.

Ability and access

Accessibility is one of our nine material sustainability issues as tailoring the learning experience to the ability level of the learner is a key factor in reaching more learners.

Standards on accessibility for people with disabilities are evolving. Focusing on higher education, Pearson has adopted a road map to invest in integrating accessibility standards into existing products while committing to apply those standards into new product development. In 2017, we announced that we will make 100% of our digital portfolio accessible for people with disabilities by 2020.

As an employer, disability is part of our wider commitment to inclusion. We work to ensure that appropriate procedures, training and support are in place for people with disabilities to ensure fair access to career and progression opportunities. One of our eight employee resource groups is Pearson Able – its remit is to improve company practice for learners and employees.

Innovating to address youth unemployment in South Africa

Through Tomorrow's Markets Incubator, Pearson employee Carolynne Lengfeld, Head of Learning Innovation in South Africa, is leading a team that has worked to develop Project Boost, a recruitment, job preparation and integration service in South Africa.

Boost aims to address the unemployment challenge for low-income youth, while making recruitment of high-quality candidates more efficient for potential employers. Unemployed young people who participate will receive support and training at no cost and will have access to jobs that offer the chance to build a CV, establish a network of contacts, gain work experience and increase their earnings.

The project is in its early R&D phase and will be piloted with a small group of unemployed young people alongside a number of employers who have shown interest in the service.

The initiative is targeted at young people between the ages of 18 and 34 who are below or close to the poverty line. This group remains vulnerable in the labour market with an unemployment rate of 37.1%, which is 10.6% higher than the national average. Pearson aims to replicate the model in other countries in Africa in due course.

The DFID Business Partnership Fund is supporting this project by providing a combination of technical assistance and a financial grant to the value of £225,210 over 20 months.

Sustainability

Community contribution

Pearson focuses on a small number of campaigns and issues where, working together with others, we can both improve access to education for underserved groups as well as be relevant to our commercial objectives. We invest in a small number of partnerships, making sure we provide opportunities for our employees to bring their energy and enthusiasm in getting involved in social impact work.

Our 2017 investment in social innovation and impact was £7.2m or 1.4% of adjusted pre-tax profits and included a number of programmes:

- Our Every Child Learning partnership with Save the Children and Tomorrow's Markets Incubator, which supports Pearson employees to develop new products and services, as well as overall business models, to bring high-quality education to learners in low-income and underserved communities. Our investment in the Incubator seeks to identify commercially viable market opportunities as well as social return
- Our award-winning flagship campaign is Project Literacy. Founded and convened by Pearson, the global campaign brings together not-for-profits and companies with a shared aim of bringing the power of words to the world, by building partnerships and driving action
- Our people are our best ambassadors and advocates. We support them to give time and money to invest in communities around where they work as well as in good causes around the world.

Additionally, the Pearson Affordable Learning Fund invests 'patient capital' in independently run, for-profit, education start-ups using innovative approaches to improving learning outcomes and increasing access, at scale.

	Community Investment	Social Innovation
Project Literacy	**£3.6m**	**–**
Every Child Learning	**£0.9m**	**–**
Tomorrow's Markets Incubator	**–**	**£1.2m**
Employee engagement/ other partnerships/ local gifts	**£1.5m**	**–**
Total	**£6.0m**	**£1.2m**

Our performance sustainability rankings

One way we assess how we are doing as a sustainable business is to maintain our position in key indices and benchmarks of social responsibility.

This year, we were delighted to be recognised in the Dow Jones Sustainability Indices as best in class for the global media sector.

Dow Jones Sustainability Indexes

2017	Gold Class & Media Sector leader
2016	Silver Class
2015	Bronze Class
2014	Bronze Class

FTSE4Good

2017	Yes
2016	Yes
2015	Yes
2014	Yes

Yes signifies inclusion in FTSE4Good

2017	Yes
2016	Yes
2015	Yes
2014	Yes

Inclusion in Global 100 most sustainable corporations (Corporate Knights)

Sustainability

3 Shape the future of education

The pace of change in education is faster than ever before.

We have a responsibility to play our part in shaping a future where learning does even more to foster inclusive and equitable societies and economies. This means ensuring our learners are equipped with the skills they need to build careers and communities, navigate uncertainty, address the world's biggest sustainable development challenges and thrive in the 21st century and beyond.

Cutting-edge technology, insights and partnerships will help us deliver. We contribute to a growing body of research, working with others to together help global education systems better serve the next generation of students.

To equip learners for jobs, Pearson's Career Success Programme aims to meet the needs of both colleges and employers by providing a digital suite of assessments, learning modules and tools that help students identify career goals and the gaps in their academic and career skills that they need to fill.

Delivering the knowledge, skills and understanding students need to prepare for their chosen career, BTECs can support progression to higher or further education or into employment. Pearson VUE helps individuals prepare for their next educational or career opportunity through credentials that verify the skills and learning required for a specific job or educational programme.

There is rising demand from educators for the integration of sustainable development topics into content, courses and curricula. By integrating sustainability-related content into our products, we can explore new market opportunities while making a direct contribution to the SDGs and inspiring the next generation to improve their world. We are collaborating with leading experts in the space to advance education for sustainability and respond to our customer needs.

Pearson and Everglades University prepare learners for careers in green building

Pearson has partnered with Everglades University in the United States and the US Green Building Council (USGBC) to develop an Introduction to Sustainability digital course designed to put students on the path to high-demand careers in green energy and building design.

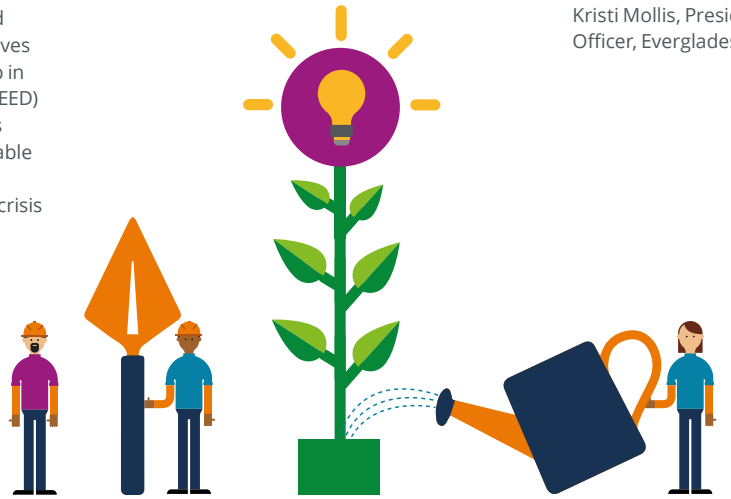
Through a combination of online and hands-on learning, the course improves students' preparation for Leadership in Energy and Environmental Design (LEED) certification in growing fields such as construction; alternative and renewable energy; environmental policy and management; land and energy; and crisis and disaster management.

Upon completion of the course, students earn certificates that can be featured in the form of digital badges and added to their résumés, demonstrating their education in and commitment to sustainability.

Ultimately, this partnership will benefit thousands of students, dozens of university staff and faculty members, and the community at large surrounding Everglades University's four locations.

"Through our partnership with the USGBC and Pearson, we are improving the quality of our course offerings and student learning outcomes, thereby further educating, training, and certifying the future leaders in these growing fields."

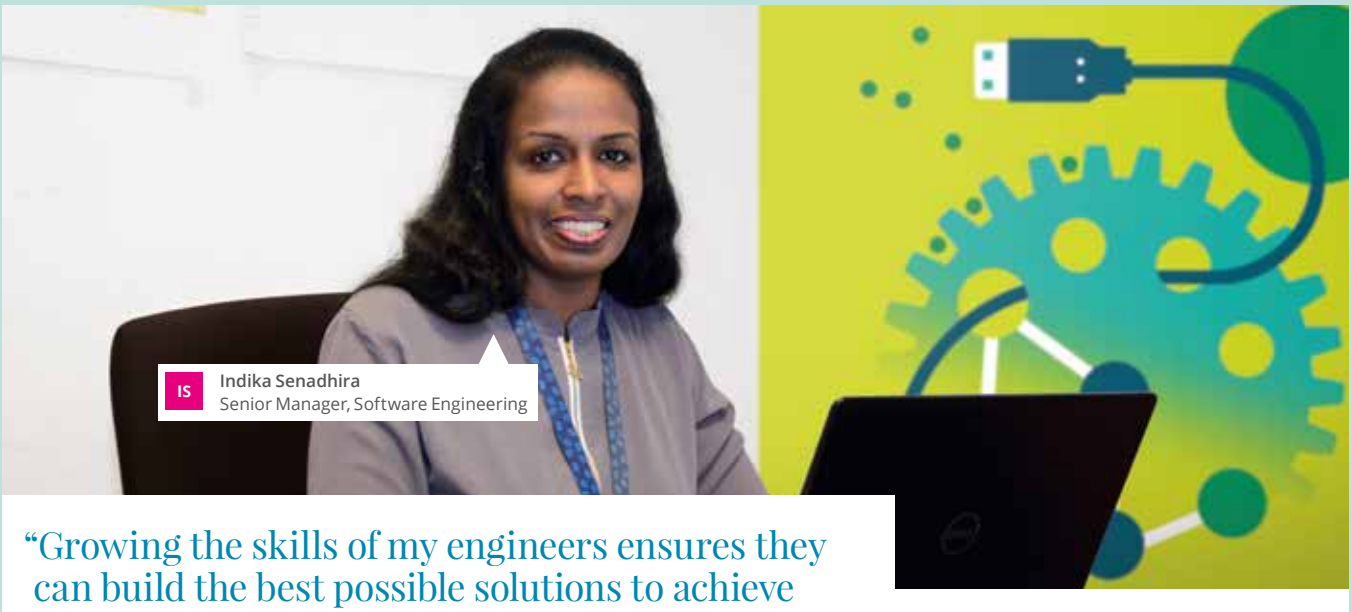
Kristi Mollis, President and Chief Executive Officer, Everglades University



Sustainability

Helping create the future of learning

An interview with Indika Senadhira, Senior Manager, Software Engineering, Pearson Technology Delivery Centre, Colombo, Sri Lanka.



> "Growing the skills of my engineers ensures they can build the best possible solutions to achieve Pearson's goals."

What excites you most about the work you do at Pearson?

IS

I'm most excited by the continuous learning opportunities available at Pearson that help me to grow in my career. There is a friendly environment and great team culture too, and I often feel like Pearson is my second home.

What is your main goal for 2018?

IS

My main goal for 2018 is to increase the technical and behavioural skills of myself and my teams. Primarily, this will help us to contribute more effectively to the development of highly scalable solutions for the business in line with Engineering Best Practices.

How are you helping Pearson in its transition to digital?

IS

I have three teams working on Next Generation technology projects that are used in Revel, eText and Learning Applications. Those applications are providing a more sophisticated digital experience for our learners and customers.

Another way I contribute to the digital transition is by encouraging a team culture of continuous learning and providing the opportunity for my team to grow. Growing the skills of my engineers ensures they can build the best possible solutions to achieve Pearson's goals.

What is your biggest win at Pearson to date?

IS

I am one of Pearson's 'home grown' managers. I joined eCollege (which was later acquired by Pearson) 13 years ago as an Associate Software Engineer. I then moved up in my career to become a Senior Manager. During that journey, the biggest win for me has been acquiring IEng accreditation with the UK's prestigious Institute of Engineering & Technology. That has opened up the opportunity for me to learn both professionally and academically, as well as contribute my knowledge to Pearson and to wider society.

The Technology Delivery Centre *in one minute*

WHO

The Technology Delivery Centre is a team of

2,230 digital specialists

used by program and product teams across Pearson.

WHAT

Capabilities include:

- Mobile testing
- Content
- Security testing
- Salesforce
- Accessibility testing
- Integration
- User interface
- Analytics & Big Data
- Digital Marketing
- Oracle
- Performance

WHERE

Operates out of Sri Lanka, India, the US and UK

WHEN

24/7, 365

Financial review

"We expect ongoing headwinds in our US higher education courseware business to be offset by improving conditions in our other businesses."

Coram Williams
Chief Financial Officer

Profit and loss statement

In 2017, Pearson's sales decreased by £39m in headline terms to £4,513m. Adjusted operating profit fell £59m to £576m (2016: £635m).

Currency movements, primarily from the depreciation of Sterling against the US Dollar and other currencies during the period, increased sales by £126m and operating profits by £23m.

The effect of disposals reduced sales by £54m and continuing adjusted operating profits by £24m.

Stripping out the impact of portfolio changes and currency movements, revenues were down 2% in underlying terms while adjusted operating profit fell £58m or 9%.

Trading contributed £58m to this decline in adjusted operating profit, other operating factors including increased amortisation expense and staff incentive contributed £95m to the decline and cost inflation, an estimated £55m. This was partly offset by a £150m year-on-year benefit from restructuring savings.

Net interest payable in 2017 was £79m, compared with £59m in 2016. The increase was primarily due to additional charges relating to the early redemption of various bonds during the year and higher US interest rates.

Our adjusted tax rate in 2017 was 11.1% (2016: 16.5%). The decrease in tax rate was primarily due to uncertain tax position provision releases following the expiry of the relevant statutes of limitation.

Adjusted earnings per share were 54.1p (2016: 58.8p).

Cash generation

Operating cash flow rose by 1% in headline terms, despite a decrease in adjusted operating profit, driven by a strong cash conversion of 116% driven by tight working capital control, strong collections and high Penguin Random House cash dividends.

Return on invested capital

On a gross basis ROIC decreased from 5.0% in 2016 to 4.3% in 2017 and from 7.2% in 2016 to 6.2% in 2017 on a net basis. The movement largely reflects lower profit in the year and increased tax payments.

Statutory results

Our statutory profit from continuing operations of £451m in 2017 compares with a loss of £2,497m in 2016. The loss in 2016 is mainly attributable to an impairment charge to North American goodwill and the higher level of restructuring spend.

Financial summary

Business performance

£ millions	2017	2016	Headline growth	CER growth	Under-lying growth
Sales	**4,513**	4,552	(1)%	(4)%	(2)%
Adjusted operating profit	**576**	635	(9)%	(13)%	(9)%
Operating cash flow	**669**	663	1%		
Adjusted earnings per share	**54.1p**	58.8p	(8)%		
Dividend per share	**17p**	52p	(67)%		
Net debt	**(432)**	(1,092)	60%		

Growth rates stated on a headline basis are calculated by comparing the reported results. Growth rates on a constant exchange rate (CER) basis are calculated after excluding the effect of exchange. Underlying growth rates exclude both the effect of exchange and portfolio changes arising from acquisitions and disposals.

Statutory results

£ millions	2017	2016	Headline growth	CER growth	Under-lying growth
Sales	**4,513**	4,552	(1)%	(4)%	(2)%
Operating profit/(loss)	**451**	(2,497)	n/a		
Profit/(loss) for the year	**408**	(2,335)	n/a		
Cash generated from operations	**462**	552	(11)%		
Basic earnings/(loss) per share	**49.9p**	(286.8)p	n/a		

The business performance measures include our adjusted performance measures which are non-GAAP measures. An explanation of these measures is included in this financial review section and full reconciliations to the equivalent statutory heading under IFRS are included in the financial key performance indicators section on p192–195.

Financial review

Capital allocation

Our capital allocation policy remains unchanged: to maintain a strong balance sheet and a solid investment grade rating, to continue to invest in the business, to have a sustainable and progressive dividend policy, and to return surplus cash to our shareholders.

Balance sheet

Net debt to EBITDA was 0.6x (or 2.1x on a simplified credit agency view adjusting for leases and other items). Net debt decreased to £432m (2016: £1,092m) reflecting disposal proceeds, operating cash flow and a benefit from the weakening of the US Dollar relative to Sterling, partially offset by restructuring costs, pension contributions, including amounts related to agreements regarding the disposals of the FT and Penguin, interest, tax, dividend payments and the share buyback.

During 2017, we took steps to reduce our level of gross debt and optimise our balance sheet, successfully executing market tenders repurchasing $383m of our $500m 3.75% US Dollar Notes due 2022 and $406m of our $500m 3.25% US Dollar Notes due 2023. In addition, we redeemed the $300m 4.625% Senior Notes due June 2018 and the $550m 6.25% Notes due May 2018.

During January 2018, we also successfully repurchased a total of $569m of debt at an average interest rate of around 2.5% by tendering for €250m of our Euro 1.875% Notes due May 2021 and €200m of our Euro 1.375% Notes due May 2025 and cancelling the associated currency swaps.

Pension plan

The overall surplus on the UK Group Pension Plan of £158m at the end of 2016 has increased to a surplus of £545m at the end of 2017. This has arisen due to increased contributions, including £227m as part of the agreements relating to the Penguin Random House merger in 2013 and FT Group sale in 2015, together with the impact of favourable movements in assumptions.

The UK Group Pension Plan used its strong funding position to purchase two insurance buy-in policies with Legal & General and Aviva, covering approximately £1.2bn (one-third) of its total liabilities. This put the Plan in an even stronger position and substantially reduced Pearson's future pension funding risk, at no further cost to the company.

Dividend

In line with our policy, the Board is proposing a final dividend of 12p (2016: 34p) which results in an overall dividend of 17p (2016: 52p) subject to shareholder approval.

Share buyback

We launched a £300m share buyback, beginning on 18 October 2017 utilising part of the proceeds from the disposal of a 22% stake in Penguin Random House. We completed the programme on 16 February 2018.

Businesses held for sale

Following the decision to sell both WSE and the K-12 school courseware business in the US, the assets and liabilities of those businesses have been classified as held for sale on the balance sheet at 31 December 2017.

2018 outlook

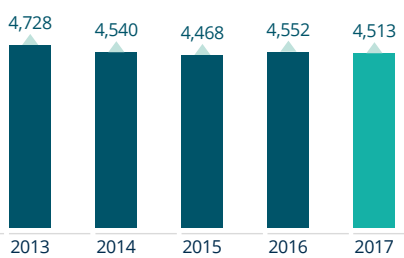
2017 was a year of progress for Pearson, delivering adjusted operating profit at the top end of our guidance range and continuing to invest in the digital transformation and simplification of the company. We expect to make further progress in 2018, with underlying profit growth, reporting adjusted operating profit of between £520m and £560m and adjusted earnings per share of 49p to 53p. This reflects our portfolio and exchange rates as at 31 December 2017 and the factors outlined overleaf.

Key performance indicators *Maintain long-term growth*

See a summary of all our KPIs on p2–3

Sales (£m)

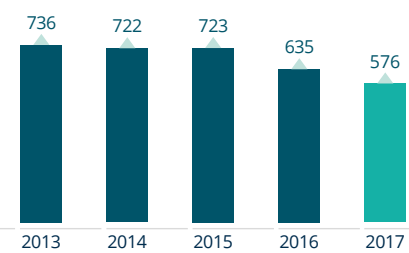
£4,513m
-1%



Sales decreased in headline terms by £39m or 1% and fell by 4% in CER terms and 2% in underlying terms. The underlying decline was due to a 4% decline in North America, partially offset by stabilisation in Core and Growth. Over the last five years, revenues have benefited from growth in digital and the relative strength of the dollar but this has been offset by pressure on print revenues, cyclical and policy factors and adverse currency movements in some of our markets.

Adjusted operating profit (£m)

£576m
-9%



Adjusted operating profit fell by 9% in headline terms with the impact of lower sales, other operating factors, including increased amortisation and staff incentives, and cost inflation offsetting the benefit from restructuring savings. Over the last five years, adjusted operating profit has declined due to the pressure on revenues in higher margin businesses, portfolio changes and increased investment in digital, partially offset by benefits from restructuring.

Financial review

Trading

We expect ongoing headwinds in our US higher education courseware business to be offset by improving conditions in our other businesses.

Portfolio changes

We completed the sale of a 22% stake in Penguin Random House and our Chinese English test preparation business GEDU in 2017. The annualised impact of these disposals will reduce 2018 operating profit by £44m. We expect to complete the disposal of WSE and our stake in Mexican joint venture Utel in the first half of 2018 and have announced that we have concluded the strategic review of our US K-12 courseware business and have classified the business as held for sale. WSE contributed £195m to 2017 sales and WSE and Utel contributed £5m to 2017 adjusted operating profit and £5m to statutory profit. US K-12 courseware is expected to contribute £385m to 2018 sales and around £11m to 2018 adjusted and statutory profit.

Other operational factors, incentives and inflation

Our 2018 guidance incorporates cost inflation of around £50m together with other operational factors and incentives of £30m.

Restructuring benefits

We expect incremental in-year benefits from the 2017–2019 restructuring programme of £80m in 2018. Exceptional restructuring costs of £90m will be excluded from adjusted operating profit in line with our recent practice.

Interest and tax

We expect a 2018 net interest charge of around £45m and a tax rate of 20%.

Currency

In 2017, Pearson generated approximately 61% of its sales in the US, 7% in Greater China, 5% in the Eurozone, 3% in Brazil, 3% in Canada, 3% in Australia, 2% in South Africa and 1% in India and our guidance is based on exchange rates at 31 December 2017.

We calculate that a 5 cent move in the US Dollar exchange rate to Sterling would impact adjusted earnings per share by between 2p and 2.5p.

Adjusted performance measures

The Group's adjusted performance measures are non-GAAP financial measures and are included as they are key financial measures used by management to evaluate performance and allocate resources to business segments. The measures also enable investors to more easily, and consistently, track the underlying operational performance of the Group and its business segments by separating out those items of income and expenditure relating to acquisition and disposal transactions, and major restructuring programmes.

The Group's definition of adjusted performance measures may not be comparable to other similarly titled measures reported by other companies. A reconciliation of the adjusted measures to their corresponding statutory reported figures is shown in summary below and in more detail on p192–195.

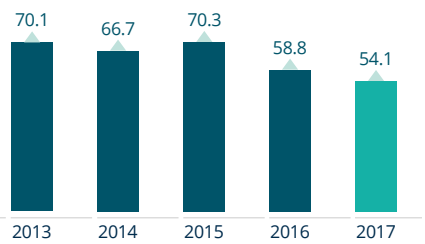
Key performance indicators *Deliver sustainable returns*

See a summary of all our KPIs on p2–3

Performance over the last five years reflects the market pressures we have faced. But we are building a strong future returns potential.

Adjusted earnings per share (£m headline)

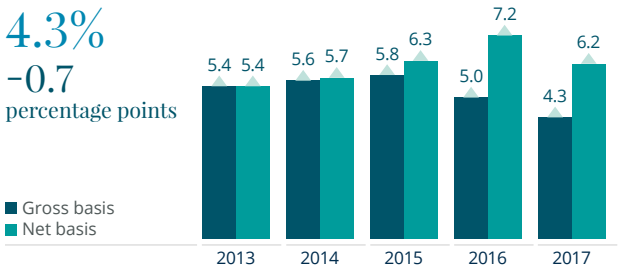
54.1p
-8%



Adjusted earnings per share (EPS) is down 8% in 2017, reflecting lower adjusted operating profit and increased interest charges partially offset by a decrease in the tax rate. Over the last five years EPS has declined in line with the decline in adjusted operating profit.

Return on invested capital (% headline)

4.3%
-0.7
percentage points



Return on invested capital (ROIC) fell by 0.7 percentage points to 4.3% in 2017 mainly due to lower adjusted operating profit and higher cash tax paid. We have also presented ROIC on a net basis after removing impaired goodwill from the invested capital balance. The net approach assumes that goodwill which has been impaired is treated in a similar way to goodwill disposed as it is no longer being used to generate returns.

Financial review

Adjusted operating profit

Adjusted operating profit includes the operating profit from the total business, including the results of discontinued operations when relevant. There were no discontinued operations in either 2016 or 2017. A reconciliation of the statutory measure to the adjusted measure is shown below:

£ millions	2017	2016
Operating profit/(loss)	**451**	(2,497)
Add back: Cost of major restructuring	**79**	338
Add back: Other net (gains) and losses	**(128)**	25
Add back: Intangible charges	**166**	2,769
Add back: Impact of US tax reform	**8**	–
Adjusted operating profit	**576**	635

In January 2016, the Group announced that it was embarking on a restructuring programme to simplify the business, reduce costs and position the company for growth in its major markets. The costs of this 2016 restructuring programme in 2016 were significant enough to exclude from the adjusted operating profit measure so as to better highlight underlying performance. A new restructuring programme, the 2017-2019 restructuring programme announced in May 2017, began in the second half of 2017 and is expected to drive further significant cost savings. This new programme has also been excluded from the adjusted operating profit measure.

These major restructuring costs are analysed below:

£ millions	2016
2016 restructuring programme	
Combining into one single product organisation	77
Integrating our assessment operations	33
Reducing exposure to large-scale direct delivery	67
Making efficiency improvements in enabling functions	110
Rationalising our property portfolio and consolidating major supplier agreements	51
Total major restructuring cost	338

£ millions	2017
2017-2019 restructuring programme	
Adjusting the cost base in our US higher education courseware business	**23**
Further efficiency improvements in enabling functions through back office change programmes in Human Resources, Finance and Technology	**23**
Further rationalisation of property and supplier agreements	**33**
Total major restructuring cost	**79**

Other net gains and losses that represent profits and losses on the sale of subsidiaries, joint ventures, associates and other financial assets are excluded from adjusted operating profit as it is important to highlight their impact on operating profit, as reported, in the period in which the disposal transaction takes place in order to understand the underlying trend in the performance of the Group. Other gains of £128m in 2017 largely relate to the sale of the test preparation business in China which resulted in a profit on sale of £44m and the part sale of the Group's share in Penguin Random House which resulted in a profit of £96m. In 2016, the losses mainly relate to the closure of the English language schools in Germany and the sale of the Pearson English Business Solutions business in North America.

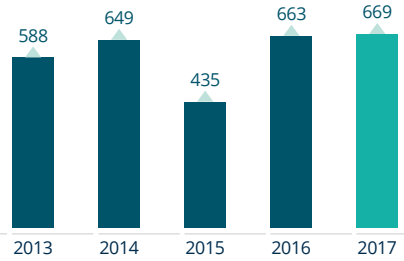
Charges relating to acquired intangibles and acquisitions are also excluded from adjusted operating profit when relevant as these items reflect past acquisition activity and do not necessarily reflect the current year performance of the Group. In 2016, intangible charges included an impairment of goodwill in our North American business of £2,548m.

Key performance indicators *Manage cash effectively*

See a summary of all our KPIs on p2–3

Operating cash flow (£m headline)

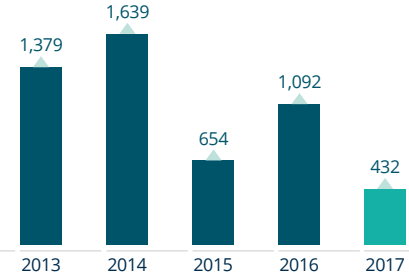
£669m
+1%



Operating cash flow increased by 1% in 2017, despite the reduction in adjusted operating profit, reflecting continued tight working capital control, strong cash collections and higher dividends from Penguin Random House.

Net debt (£m headline)

£432m
+60%



The Group's net debt decreased from £1,092m at the end of 2016 to £432m at the end of 2017 as the proceeds from disposals, operating cash flow and the positive effect of exchange rate movements more than offset restructuring spend, tax, interest, pension and dividend payments.

Financial review

As a result of US tax reform, the reported tax charge on a statutory basis includes a benefit from revaluation of deferred tax balances to the reduced federal rate of £5m and a repatriation tax charge of £6m. In addition to the impact on the reported tax charge, the Group's share of profit from associates was adversely impacted by £8m. These adjustments have been excluded from adjusted operating profit and the adjusted tax charge as they are considered to be transition adjustments that are not expected to recur in the near future.

Adjusted earnings per share

Adjusted earnings includes adjusted operating profit and adjusted finance and tax charges. A reconciliation to the statutory profit is shown below:

£ millions	2017	2016
Profit/(loss) for the year	**408**	(2,335)
Non-controlling interest	**(2)**	(2)
Add back: Cost of major restructuring	**79**	338
Add back: Other net (gains) and losses	**(128)**	25
Add back: Intangible charges	**166**	2,769
Add back: Other net finance (income)/costs	**(49)**	1
Add back: Impact of US tax reform on profit from associate	**8**	–
Tax benefit relating to items added back	**(42)**	(317)
Adjusted earnings	**440**	479
Weighted average number of shares (millions)	**813.4**	814.8
Adjusted earnings per share	**54.1p**	58.8p

Net finance costs classified as other net finance costs or income are excluded in the calculation of adjusted earnings.

Finance income relating to retirement benefits are excluded as management believes the presentation does not reflect the economic substance of the underlying assets and liabilities. Finance costs relating to acquisition transactions are also excluded as these relate to future earn-outs or acquisition expenses and are not part of the underlying financing.

Foreign exchange and other gains and losses are also excluded as they represent short-term fluctuations in market value and are subject to significant volatility. Other gains and losses may not be realised in due course as it is normally the intention to hold the related instruments to maturity.

In 2017, the total of these net finance cost items excluded from adjusted earnings was a gain of £49m compared with a loss of £1m in 2016. Finance income relating to retirement benefits decreased from £11m in 2016 to £3m in 2017, but this decrease was more than offset by foreign exchange gains on unhedged cash and cash equivalents and other financial instruments that generated losses in 2016.

The adjusted income tax charge excludes the tax benefit or charge on items that are excluded from the profit or loss before tax. In addition, the tax benefit from tax deductible goodwill and intangibles is added to the adjusted income tax charge as this benefit more accurately aligns the adjusted tax charge with the expected rate of cash tax payments.

Operating cash flow

Operating cash flow is presented in order to align the cash flows with corresponding adjusted operating profit measures. A reconciliation to operating cash flow from net cash generated from operations, the equivalent statutory measure, is shown below:

£ millions	2017	2016
Net cash generated from operations	**462**	522
Dividends from joint ventures and associates	**146**	131
Capital expenditure on property, plant, equipment and software	**(237)**	(247)
Add back: Cost of major restructuring paid	**71**	167
Add back: Special pension contribution paid	**227**	90
Operating cash flow	**669**	663

In addition to the dividends received from associates above, there were dividends from Penguin Random House in 2017 of £312m relating to the recapitalisation of Penguin Random House following the sale of part of the Group's interest in the venture.

This cash flow is not related to the underlying trading of the business and has not been included in the adjusted operating cash measure.

Costs of major restructuring paid in 2017 include cash flow from both the 2016 restructuring programme (£44m) and the 2017–2019 programme (£27m).

Special pension contributions of £227m in 2017 were made as part of the agreements relating to the Penguin Random House merger in 2013 (£202m) and the sale of the FT Group in 2015 (£25m). In 2016, special pension contributions of £72m (net of tax) relate to the sale of the FT Group.

Return on invested capital (ROIC)

ROIC is a non-GAAP measure and has been disclosed as it is part of Pearson's key business performance measures. ROIC is used to track investment returns and to help inform capital allocation decisions within the business. Average values for total invested capital are calculated as the average monthly balance for the year.

For the first time in 2017, we have presented ROIC on a net basis after removing impaired goodwill from the invested capital balance. The net approach assumes that goodwill that has been impaired is treated in a similar fashion to goodwill disposed as it is no longer being used to generate returns.

	2017	2016	2017	2016
£ millions	Gross basis		Net basis	
Adjusted operating profit	**576**	635	**576**	635
Operating cash tax paid	**(75)**	(63)	**(75)**	(63)
Return	**501**	572	**501**	572
Average invested capital	**11,568**	11,464	**8,126**	7,906
ROIC	**4.3%**	5.0%	**6.2%**	7.2%

Financial review

Other financial information

Net finance costs

£ millions	2017	2016
Net interest payable	(79)	(59)
Finance income in respect of retirement benefits	3	11
Other net finance income/(costs)	46	(12)
Net finance costs	(30)	(60)

Net interest payable was £79m in 2017, compared with £59m in 2016. The increase was primarily due to higher US interest rates in 2017, additional charges relating to the early redemption of various bonds during the year and some additional interest on tax provisions. In March and November 2017 respectively, the Group redeemed the $550m 6.25% global Dollar bonds and the $300m 4.625% US Dollar notes, both originally due in 2018. In addition, in August 2017, the Group redeemed $383m out of the $500m 3.75% US Dollar notes due in 2022 and $406m out of the 3.25% US Dollar notes due in 2023. Although there is a charge in respect of the early redemptions, there are partial year interest savings as a result which have flowed through the income statement in the period since redemption, with the full annualised savings coming through in 2018.

In 2017, the total of other net finance income excluded from adjusted earnings was a gain of £49m compared with a loss of £1m in 2016. Finance income relating to retirement benefits decreased from £11m in 2016 to £3m in 2017 reflecting the comparative funding position of the plans at the beginning of each year. This decrease was more than offset by foreign exchange gains on unhedged cash and cash equivalents and other financial instruments that generated losses in 2016.

Capital risk

The Group's objectives when managing capital are:

- To safeguard the Group's ability to continue as a going concern and retain financial flexibility by maintaining a strong balance sheet
- To maintain a solid investment grade credit rating
- To provide returns for shareholders.

The Group is currently rated BBB (negative outlook) by Standard and Poor's and Baa2 (negative outlook) by Moody's.

Net debt

The net debt position of the Group is set out below:

£ millions	2017	2016
Cash and cash equivalents	645	1,459
Marketable securities	8	10
Derivative financial instruments	–	(93)
Bank loans and overdrafts	(15)	(39)
Bonds	(1,062)	(2,420)
Finance lease liabilities	(8)	(9)
Net debt	(432)	(1,092)

Net debt was reduced during the year following the partial disposal and recapitalisation of the Group's stake in Penguin Random House.

Bond debt was reduced to £1.1bn from £2.4bn through debt repayments of £1.3bn which reduced cash balances. The Group holds Dollar debt as a natural hedge of the Group's largest earnings generating region, North America.

Despite the low balance sheet gearing, the Group has significant operating lease liabilities of around £1.2bn which are not currently included as balance sheet liabilities but are included by the credit rating agencies within debt.

Liquidity and funding

The Group had a strong liquidity position at 31 December 2017, with over £600m of cash and an undrawn US Dollar denominated Revolving Credit Facility due in 2021 of $1.75bn (at 31 December 2016, the Group had cash of over £1.4bn and an undrawn Revolving Credit Facility due 2021 of $1.75bn). To ensure efficient use of the Group's cash balances, the Group repaid €450m (around £400m) of bond debt in January 2018 at a premium broadly equivalent to interest due for 2018, which will result in a reduced interest charge from 2019.

Taxation

The effective tax rate on adjusted earnings in 2017 was 11.1% compared with an effective rate of 16.5% in 2016. The decrease in tax rate was primarily due to uncertain tax position provision releases due to the expiry of relevant statutes of limitation.

The reported tax charge on a statutory basis in 2017 was £13m (3.1%) compared with a benefit of £222m (8.7%) in 2016. The statutory tax benefit in 2016 was mainly due to the release of deferred tax liabilities relating to tax deductible goodwill that was impaired. Operating tax paid in 2017 was £75m compared with £63m in 2016.

As a result of US tax reform, the reported tax charge on a statutory basis includes a benefit from revaluation of deferred tax balances to the reduced federal rate of £5m and a repatriation tax charge of £6m. The Group continues to analyse the detail of the new legislation and this may result in revisions to these impacts. In addition to the impact on the reported tax charge, the Group's share of profit from associates was adversely impacted by £8m.

Other comprehensive income

Included in other comprehensive income are the net exchange differences on translation of foreign operations. The loss on translation of £262m in 2017 compares with a gain in 2016 of £913m and has arisen due to the relative weakness of the US Dollar compared with Sterling. A significant proportion of the Group's operations are based in the US and the US Dollar weakened in 2017 from an opening rate of £1:$1.23 to a closing rate at the end of 2017 of £1:$1.35. At the end of 2016 most of the currencies that Pearson is exposed to had strengthened relative to Sterling following the Brexit vote. In 2016, the US Dollar had strengthened in comparison with the opening rate moving from £1:$1.47 to £1:$1.23.

Also included in other comprehensive income in 2017 is an actuarial gain of £182m in relation to post-retirement plans of the Group and our share of the post-retirement plans of Penguin Random House. The gain arises from the impact of favourable movements in mortality assumptions, discount rates, member options on retirement and asset returns which offset the impact of the UK Group plan's purchase of insurance buy-in policies. The gain in 2017 compares with an actuarial loss in 2016 of £276m.

Financial review

Post-retirement benefits

Pearson operates a variety of pension and post-retirement plans. Our UK Group Pension Plan has by far the largest defined benefit section. We have some smaller defined benefit sections in the US and Canada but, outside the UK, most of our companies operate defined contribution plans.

The charge to profit in respect of worldwide pensions and retirement benefits amounted to £72m in 2017 (2016: £70m) of which a charge of £75m (2016: £81m) was reported in adjusted operating profit and an income of £3m (2016: £11m) was reported against other net finance costs.

The overall surplus on the UK Group pension plan of £158m at the end of 2016 increased to a surplus of £545m at the end of 2017. The increase has arisen principally due to the impact of favourable movements in assumptions discussed above but also due to increased contributions, including £227m as part of the agreements relating to the Penguin Random House merger in 2013 and FT Group sale in 2015.

In total, our worldwide net position in respect of pensions and other post-retirement benefits increased from a net asset of £19m at the end of 2016 to a net asset of £441m at the end of 2017.

Dividends

The dividend accounted for in our 2017 financial statements totalling £318m represents the final dividend in respect of 2016 (34.0p) and the interim dividend for 2017 (5.0p). We are proposing a final dividend for 2017 of 12p, bringing the total paid and payable in respect of 2017 to 17p. This final 2017 dividend, which was approved by the Board in February 2018, is subject to approval at the forthcoming AGM and will be charged against 2018 profits. For 2017, the dividend is covered 3.2 times by adjusted earnings and, after excluding the contribution from Penguin Random House, the dividend is covered 2.5 times.

Share buyback

The £300m share buyback programme announced in October 2017 was completed on 16 February 2018. At 31 December 2017, 21m shares at a value of £153m had been purchased. Cash payments of £149m had been made in respect of the purchases with the outstanding £4m settlement made at the beginning of January 2018. This £4m together with the remaining value of the buyback programme (£147m) was recorded as a liability on the balance sheet at 31 December 2017. A further 22m shares were repurchased under the programme in 2018.

Businesses held for sale

Following the decision to sell both our Wall Street English language teaching business and the K-12 school courseware business in the US, the assets and liabilities of those businesses have been classified as held for sale on the balance sheet at 31 December 2017.

Goodwill and intangible assets

Amortisation and impairment charges in 2017 were £166m compared with a charge of £2,769m in 2016. The 2016 charge includes an impairment charge to North American goodwill of £2,548m. This charge arose following trading in the final quarter of 2016 and the consequent revision to strategic plans which reflected underlying issues in the US higher education courseware market that were more severe than had previously been anticipated. These issues related to declining student enrolments, changes in buying patterns of students and correction of inventory levels by distributors and bookshops.

Acquisitions and disposals

There were no significant acquisitions in 2017 or 2016. In 2017, disposals in total gave rise to a profit of £128m. These disposals included the sale of our test preparation business in China (GEDU) which resulted in a profit on sale of £44m and the sale of a portion of our stake in Penguin Random House to our venture partner, Bertelsmann, resulting in a reduction in our interest from 47% to 25% and a profit on sale of £96m. In 2016, we closed our English language schools in Germany and also sold the Pearson English Business Solutions business. These two disposals, together with other smaller disposal related items, gave rise to an aggregate loss of £25m.

Related party transactions

Transactions with related parties are shown in note 36 of the consolidated financial statements.

Post-balance sheet events

During January 2018, Pearson successfully executed market tenders to repurchase €250m of its €500m Euro 1.875% Notes due May 2021 and €200m of its €500m Euro 1.375% Notes due May 2025.

On 16 February 2018, Pearson completed its £300m share buyback programme. In aggregate between 18 October 2017 and 16 February 2018, Pearson repurchased 42,835,577 shares, including 21,839,676 repurchased since 31 December 2017, at a cost of £151m.

Coram Williams
Chief Financial Officer

Financial review

Helping create the future of learning

An interview with Alvaro Castro, Product Management Analyst, Pearson Test of English

What excites you most about the work you do at Pearson?

AC

In Pearson I have the amazing opportunity to work with different geographies all over the world. PTE Academic is delivered in over 50 countries and part of my job is really to understand the singularities of each market. I particularly enjoy engaging with the geographies and providing them with data insights that can inform their business strategy.

What is your main goal for 2018?

AC

To support the growth of the PTE Academic test, our main goal as a team is to improve the operational infrastructure around the test, and to redevelop the customer journey. My role is to help the team achieve this goal by analysing operational performance, identifying areas of improvement and working with stakeholders to make them.

How are you helping Pearson in its transition to digital?

AC

PTE Academic is a computer-based test and I have been involved in the operational and technology improvements of the product. As with every digital product, we can generate valuable operational data that can turn into evidence based decision-making.

What is your biggest win at Pearson to date?

AC

I am proud of my work producing genuine data reporting that has been used by teams, colleagues and management. In addition to providing valuable insight and informing decision-making at all levels, I have been able to introduce a data-driven culture within the team and with the geographies. These reporting capabilities have also served to provide accurate forecasting and a robust test centre capacity plan, which has been instrumental for supporting the growth of the test.

Pearson Test of English *in one minute*

The Pearson Test of English Academic is the computer-based English test trusted by universities, colleges and governments around the world.

250 centres around the world

"The test is a *true reflection* of what's required in communicating ... Reading, Writing, Speaking and Listening"

Elizabeth Karanja, Australia, October 2017

Differentiated consumer experience drove c.70% volume growth

+c.70%

"I introduced a *data-driven culture*. More accurate forecasting has supported the growth of the test."

AC Alvaro Castro
Product Management Analyst

Operating performance

North America

Market summary

Our largest market includes all 50 US states and Canada.

Contribution to Group revenues

65%

Sales

£2,929m

Adjusted operating profit

£394m

Efficacy finding

Working with Penn State University, we found that students in Introductory Physics courses who do better on their Mastering Physics homework tended to perform better in exams and external assessments.

Revenues declined 4% in underlying terms, primarily due to anticipated declines in higher education and school courseware, school assessment and Learning Studio, a learning management system we are retiring.

North American higher education courseware fell 3%. School courseware fell high-single digits, impacted by a lower adoption participation rate and weak Open Territory sales in the second half of the year. School assessment declined high-single digits, due to previously announced contract losses. Learning Studio revenues continued to decline as we move towards the retirement of the product in 2019. Offsetting that, we saw modest growth in both virtual schools and Online Program Management (OPM) due to good underlying volume growth partially offset by some contract exits and in-sourcing. Revenues in North American Professional Certification were flat on phasing of new contracts and a slowdown in IT certification late in 2017.

Adjusted operating profits fell 10% in underlying terms, due primarily to the impact of lower sales and other operating factors partially offset by restructuring savings.

Courseware

School

In school, revenue declined high-single digits primarily due to sharp declines across Open Territory states in the second half of the year. This was partially offset by growth in Adoption state revenues where strong performance in Texas Grades K-12 Spanish, Indiana Grades K-12 Science and South Carolina Grades 6-8 Science outweighed a lower adoption participation rate resulting from our decision not to compete for the California Grades K-8 English Language Arts (ELA) adoption with a core basal programme.

Our new adoption participation rate fell to 61% from 64% in 2016. We won an estimated 38% share of adoptions competed for (30% in 2016) and 29% of total new adoption expenditure of $365m (19% of $470m in 2016).

Higher education

In higher education, total US college enrolments, as reported by the National Student Clearinghouse, fell 1.1%, with combined two-year public and four-year for-profit enrolments declining 2.5%. Enrolment weakness was particularly focused on part-time students where enrolment declined 3.3%, a bigger decline than in any of the last five years. Full-time enrolment grew 0.3%, the first expansion since autumn 2010.

Net revenues in our higher education courseware business declined 3% during the year. We estimate around 2% of this decline was driven by lower enrolment; just over 1% from the adoption of Open

Market spotlight | North American Assessment

Association of American Medical Colleges

The Association of American Medical Colleges (AAMC) has selected Pearson VUE to deliver the prestigious Medical College Admission Test® (MCAT®) beginning in 2018.

"We are proud to enter into an agreement with the AAMC to deliver this important exam to tomorrow's doctors," says Bob Whelan, President, Pearson Assessments. "We understand the AAMC's commitment to excellence and we are proud to be part of their continued commitment to examinees and the testing community. As an extension of the AAMC to its test takers, we will deliver each exam with care, consistency and the highest levels of customer service."

Pearson VUE will deliver the MCAT exam in its premium, patented, owned-and-operated network of Pearson Professional Centres and several Pearson VUE Authorized Test Centre Selects globally. In addition to the existing test centres, Pearson VUE is investing in an expansion of its test centre network to provide additional capacity for test takers.

The Pearson Professional Centres are the gold standard in exam delivery, offering test takers a professional, highly secure and consistent testing experience.

Operating performance

Link to strategic priorities 1 Grow share through digital transformation 2 Invest in structural growth markets See *Our strategy*, p13–21

Educational Resources (OER); around 5% from the secondary market, new initiatives and other factors, primarily the growth in print rental; offset by c.3% benefit from institutional selling and the shift to digital and a 2% benefit in 2017 from lower returns by the channel.

In 2017, Pearson's US higher education courseware market share, as reported by MPI, was in the upper half of the c.40–41.5% range seen over the last five years.

During 2017, we performed strongly in Statistics and Business Statistics, Biology and Accounting. Statistics benefited from the popularity of "best in class" learning application *StatCrunch*, Biology from the success of *Campbell Biology 11e* and *MasteringBiology*, and Accounting from the success of *Miller-Nobles Horngren Accounting 11e* and *MyAccountingLab*. This was offset by weakness in Information Technology, particularly in the for-profit sector and continued softness in Developmental Mathematics.

Digital revenues grew 9% benefiting from continued growth in direct sales, favourable mix and selected price increases. Global digital registrations of MyLab and related products fell 1%. In North America, digital registrations fell 3% with good growth in Science, Business & Economics and Revel offset by lower overall enrolment and continued softness in Developmental Mathematics. Revel registrations grew more than 50%. Including stand-alone eBook registrations, total North American digital registrations were flat.

The actions announced in early 2017 to promote access over ownership met with success. We reduced the rental price of 2,000 eBook titles and saw eBook revenues increase more than 20% in response. Our print rental programme has had a successful start, and we have added more than 90 further titles. In institutional courseware solutions we signed 210 institutions to our Inclusive Access (Direct Digital Access, DDA) solutions, taking the total to over 500. During the year, we delivered over 1m course enrolments with inclusive access rising to c.5% of our higher education revenue as more colleges and faculties see the benefit of this model.

Assessment

School assessment

In school assessment (State and National assessments), revenues declined high-single digits due to previously announced contract losses.

Pearson secured contract extensions in Virginia, Indiana, Arizona, Minnesota, Puerto Rico, Kentucky, New York City and North Carolina and for the National Assessment of Educational Progress.

We delivered 25.3m standardised online tests to K-12 students, up 7% from 2016. TestNav 8, Pearson's next-generation online test platform, supported a peak load of 752,000 tests in a single day and provided 99.99% up time. Our AI scoring systems scored 35m responses to open-ended test items, around 30% of the total. Paper-based standardised test volumes fell 7% to 20.4m.

Professional Certification

In Professional Certification, VUE global test volume rose 1% to over 15m. Revenues in North America were flat, with continued growth in certification for professional bodies, offset by modest declines in US teacher certification and the GED High School Equivalency Test, after strong performance last year, and by weakness in higher level IT certifications in the second half.

We signed over 50 new contracts in 2017 including a multi year contract with the Association of American Medical Colleges (AAMC) to administer the MCAT, and multi-year contracts with ExxonMobil and the Project Management Institute. Our renewal rate on existing contracts continues to be over 95%.

Helping create the future of learning An interview with Glenn Hubbard, Pearson author, economist and academic

"This digital experience will completely change the way we teach."

The digital experience that students get can really shape their understanding of the subject. Digital gives a much better experience for students – it gives them a real world feel, with first class pedagogy and assessment built in – I can't imagine a better way to learn.

This digital experience will completely change the way we teach. It meets students at their point of need. Students are able to go as fast or slow through the content as they need, getting a great learning experience. From the professor's perspective, they know their student is getting help to prepare for class.

We are in the early days of an incredibly exciting future of learning. Students come to economics as they care about the world and want to learn about it. A product that can bring the real world together with a user-friendly interface for students is a game changer. The technology we have makes that future possible.

We are going to see a future in less than ten years' time where students are no longer lugging a big bag of textbooks around. Instead they will have a simple interface that gives them a great learning experience.

Operating performance

North America

Clinical assessment

Clinical assessment sales declined slightly on an absence of new major product introductions. Q-Interactive, Pearson's digital solution for Clinical Assessment administration, saw continued strong growth in licence sales with sub-test administrations up more than 33% over the same period last year.

Services

Connections Education

Connections Education, our virtual school business, served nearly 78,000 Full Time Equivalent students through full-time virtual and blended school programmes, up 6% on last year.

Two new full-time online, state-wide, partner schools opened for the 2017–2018 school year. Enrolment growth from new and existing schools was partially offset by the termination of a school partnership at the end of the 2016–2017 school year.

Revenues grew modestly as enrolment growth was partially offset by increased in-sourcing, as some partners took non-core services in-house.

Enrolment and revenue is expected to grow in 2018 as growth in existing school partnerships and the opening of new partner schools for the 2018–2019 school year offsets the termination of two further contracts and the in-sourcing of services by some customers.

The 2017 Connections Academy Parent Satisfaction Survey showed strong results with 92% of families with students enrolled in full-time online partner schools stating they would recommend the schools to others and 95% agreeing that the curriculum is of high quality. Results from the survey are available at pear.sn/HPTn30dCNHH.

Pearson Online Services

In Pearson Online Services, revenues declined high-single digits, primarily due to a decline in Learning Studio revenues as we retire the product and the restructuring of smaller non-OPM contracts. Learning Studio declined by just over 50% to a revenue contribution of £11m in 2017. In OPM, we grew revenues modestly as course enrolments grew strongly, up 8% to more than 341,000, boosted by good growth and programme extensions at key partners, including Arizona State University Online, Maryville University, Rutgers University and University of Alabama at Birmingham and from new partners, partially offset by contract exits.

We signed 45 multi-year programmes in 2017, renewed 19 programmes and launched 14 new programmes at partners, including Maryville University, Duquesne University and Ohio University. During the year, we also agreed the termination of nine programmes that were not mutually viable and did not renew a further six programmes.

Brinker International, Inc. (NYSE: EAT), one of the world's leading casual dining restaurant companies and owner of Chili's® Grill & Bar and Maggiano's Little Italy®, with over 1,600 owned, operated and franchised restaurant locations, partnered with Pearson to launch a comprehensive employer-education programme Best You EDU that provides free educational opportunities to Brinker employees, including foundational, GED and Associate Degree programmes.

2018 outlook

US higher education courseware

In US higher education courseware, we expect revenues to be flat to down mid-single digit percentages as similar pressures seen in the last two years continue with lower college enrolments, increased use of OER and attrition from growth in the secondary market driven by print rental are partially offset by growth in digital revenues, benefits from our actions to promote access over ownership and a continued normalisation of channel returns behaviour.

Evidence of a marginally slower rate of decline in US student enrolment, together with slightly lower than expected attrition from OER in 2017, means that we are now planning for an underlying decline in demand of around 6% in US higher education courseware, slightly improved from our prior range of 6% to 7%.

North American student assessment

We expect stable testing revenues in North American student assessment as new contracts offset a continued contraction in revenue associated with our PARCC contract.

Connections Education

Connections Education is expected to grow modestly as new partner school openings and good growth in enrolment are partially offset by in-sourcing of non-core services by some partners and contract exits.

Professional Certification

North American Online Program Management is expected to see modest growth in revenue as investment in new programs begin to ramp up. Professional certification is expected to grow revenues in the mid-single digits benefiting from new contracts, including our nationwide contract with the AAMC.

Author view | North American Services | Jean M Twenge, Professor of Psychology at San Diego University and Pearson author

A Pearson author's view on the future

As a professor, staying relevant to my students is not just about what I teach, but the way I teach it. With the advent of iGen – the smartphone generation – academics and publishers need to be evolving. This means offering digital, interactive learning to stay successfully switched on by the students of today and of the future.

Operating performance

Link to strategic priorities 1 Grow share through digital transformation 2 Invest in structural growth markets See *Our strategy*, p13–21

Core

Market summary

Our international business in established and mature education markets including the UK, Australia and Italy.

Contribution to Group revenues

18%

Sales

£815m

Adjusted operating profit

£50m

Efficacy finding

Research to understand the impact of Bug Club on pupils' literacy learning, their attitudes to reading and school, and their reading activity found children made 30 months of progress in 18 months.

Revenues grew 1% in headline terms, were down 1% at CER and flat on underlying terms, primarily due to growth in OPM in the UK and Australia and growth in Pearson Test of English offset by declines in school, higher education, English courseware and student assessment and qualifications.

Adjusted operating profit declined 14%, or £8m, in underlying terms due to revenue mix, investment in new products and services and business exits, partially offset by restructuring savings.

Courseware

- School
- Higher education
- English

Courseware revenues declined moderately. In school, revenues declined in Australia, due to market contraction in the primary sector partly offset by slight growth in secondary, and declines in smaller markets in Europe and Africa. In higher education, revenues were down slightly due to declines in smaller markets, while in Australia and the UK an increase in direct to institution sales and a further shift to digital offset declines in traditional textbook sales. In English, there were declines in smaller markets.

Assessment

- Student assessment and qualifications

In student assessment and qualifications, revenues declined mid-single digits primarily due to lower AS level, iGCSE and apprenticeship volumes as a result of policy changes. BTEC revenues also declined modestly as revenues recognised in 2017 lagged the greater stability we have seen in registrations and billed revenue in the year. We successfully delivered the National Curriculum Test for 2017, marking 3.5m scripts, up slightly from 2016.

- Clinical assessment

Clinical assessment grew strongly with revenues benefiting from strong growth in the new editions of the Wechsler Intelligence Scale for Children (WISC-V) and the Clinical Evaluation of Language Fundamentals (CELF-5).

- Pearson Test of English (PTE)

Pearson Test of English (PTE) saw continued strong growth in test volumes, which rose 84% from 2016, driven primarily by its use to support visa applications to the Australian Department of Immigration and Border Protection and good growth in New Zealand.

- Professional Certification

In Professional Certification, revenues were flat as the impact of last year's renegotiated terms of the UK Driving Theory test for the DVSA was offset by growth from new and existing contracts.

The future of learning | Further education Core | BTEC

They chose BTEC – will you?

This year, we've been proud to partner once again with some high profile leaders who've told us why they love their careers – and why they believe in BTEC.

The 'I Choose BTEC' campaign was all about our BTEC Ambassadors telling their stories to show how BTEC opens doors to university, an apprenticeship – and a thriving career.

Business entrepreneurs Peter Jones CBE, Jamal Edwards MBE and Sharmadean Reid MBE and double Olympic Gold medallist Max Whitlock MBE all featured on London buses, posters in schools and colleges, and in online campaigns.

Olympic hero Max Whitlock MBE said: "I'm the type of person that likes to get stuck in and really involved in what I do. That's the way I learn best. It's not about being the hardest worker in the room – it's about being the smartest. I would definitely recommend BTEC to other people."

www.ichoosebtec.com

Operating performance

Services

Higher education services

In higher education services, revenues grew strongly. Our OPM revenues were up 33%. In Australia, we saw good growth due to our successful partnership with Monash University, and continued success of the Graduate Diploma in Psychology. We have a total of c.9,300 course registrations across the seven programs in Australia up from c.6,900 in 2016. In the UK, we launched five new programs in addition to the two launched in 2016. UK course registrations grew, reaching c.1,400 compared with c.370 in 2016.

English services

English services grew, with strong growth in WSE Italy, due to the opening of new centres in 2015 and 2016, partially offset by declines in Japan.

2018 outlook

In Core, we are expecting modest growth driven by our recent investments in student assessment and qualifications, where we are offering new products and services of considerably greater value, along with continued growth in PTE and OPM with ten new program launches in the UK, and growth in existing programs in Australia.

Growth

Market summary

Our growth markets in emerging and developing economies with investment priorities in Brazil, China, India and South Africa.

Contribution to Group revenues

17%

Sales

£769m

Adjusted operating profit

£38m

Efficacy finding

Speakout: Students report that Speakout with MyEnglishLab has increased their confidence, motivation and enjoyment.

Revenues were flat in both headline and underlying terms due to growth in China, school courseware in South Africa and Pearson Test of English, offset by declines in higher education services primarily due to lower enrolment at CTI and business disposals in India, and declines in Brazil. Revenues were down 4% at CER due to the disposal of GEDU.

Adjusted operating profit increased 3% in underlying terms, reflecting the higher revenues in China, South Africa school courseware and PTE in India, together with the benefits of restructuring, partially offset by lower revenues in Brazil.

Courseware

Courseware revenues grew moderately, due to strong growth in school textbook sales in South Africa and English language courseware in China, partially offset by weakness in Brazil.

Helping create the future of learning | An interview with teachers from Gyananda School, Dehradun

Thank you MyPedia

"For a new school like ours, MyPedia has been a great support in terms of curriculum planning, assessments and teacher support. It challenges both teachers and students to break away from the conventional teaching learning methodology and encourages them to explore and derive their own conclusions."

Meenakshi Mehta Headteacher

"MyPedia is user friendly software for the teachers. I was hesitant using it earlier but now it has become an integral part of my teaching plan. It has everything that a teacher can wish for. Thank you MyPedia."

Pooja Bisht, Teacher

Gyananda

Operating performance

Link to strategic priorities 1 Grow share through digital transformation 2 Invest in structural growth markets See *Our strategy*, p13–21

Services

English services

In English services, growth in Wall Street English in China, due to new centre openings, was offset by declines in Brazil due to macroeconomic pressures.

School services

In school services, revenue fell, with student enrolment in our sistemas business in Brazil falling 14% primarily due to NAME, our public sistema, where we took the strategic decision to exit two-thirds of our contracts with municipalities due to unattractive economic prospects, together with a reduction in student enrolments in our Dom Bosco private sistema due to challenging economic conditions. In India, Pearson MyPedia, an inside service 'sistema' solution for schools, expanded to over 500 schools with approximately 157,000 learners.

Higher education services

In higher education services, revenues declined sharply due to a 14% fall in total student enrolment at CTI, our university in South Africa driven by the cumulative impact of economic factors in recent years, partially offset by improved new student enrolments in 2017, together with business exits in India.

Assessment

Pearson Test of English

Professional Certification grew strongly. Pearson Test of English saw over 30% growth in the volume of tests taken in India.

2018 outlook

In our growth markets we expect a modest increase in revenues, with growth in China in ELT products, PTE and in South Africa due to improving enrolments in CTI partially offset by declines in school courseware after a strong 2017. In Brazil, we expect revenue to increase modestly from growth in Wizard and school sistemas, partially offset by declines in government contracts. In India, we expect PTE and MyPedia to continue growing.

Penguin Random House

Following the disposal of a 22% stake on 5 October 2017 Pearson owns 25% of Penguin Random House, the first truly global consumer book publishing company.

Penguin Random House performed in line with our expectations with revenues up slightly on a headline and underlying basis year on year on rising audio sales, broadly stable print sales and modest ongoing declines in demand for eBooks, while the business benefited from bestsellers by Dan Brown, R.J. Palacio, John Grisham, Jamie Oliver and Dr. Seuss.

2018 outlook

In Penguin Random House, we anticipate a broadly level publishing performance and expect an annual after-tax contribution of around £60–65m to our adjusted operating profit.

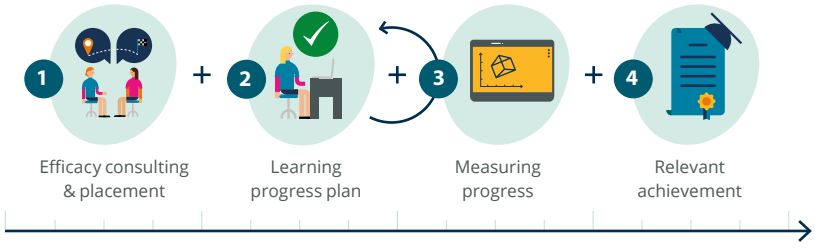
Penguin Random House

Helping create the future of learning An interview with Alan Palau, Innovation & Efficacy Delivery Director, Hispano-America, Pearson

MePro: A new English Learning solution in Hispano-America

"MePro is a new and innovative English Learning programme launching spring 2018 in Hispano-America initially, with plans to roll it out further across markets such as China, Brazil and the Middle East. English Learning opens up a world of opportunities and future careers and continues to grow as an indispensable core competency in non-English speaking countries – Pearson has the opportunity to reach millions of learners and teachers across the Growth markets through MePro which can help meet this need by leveraging successful existing content, assessment and enhanced technology solutions and platforms to deliver personalised learning for students measured by Global Scale of English learning outcomes."

Measuring learning progress



Risk management

The goal of our approach to Enterprise Risk Management (ERM), summarised in the framework below, is to support Pearson in meeting its strategic and operational objectives, as set out by the Chairman and the Chief Executive on p6–10. Our framework aligns to international standards (e.g. COSO and ISO 31000) and aids our compliance with the Financial Reporting Council's (FRC) UK Corporate Governance Code guidance on risk management.

Foundations

Risk foundations are all the elements (as set out in this framework) which underpin successful ERM, and risk management more broadly, across Pearson.

Governance and oversight

The Board, assisted by the Audit Committee, oversees the ERM framework, validates risk appetite targets, risk status and mitigation plans, plus verifies the viability statement process.

Roles and responsibilities

Day-to-day ERM is undertaken by a dedicated team. For a list of their responsibilities, as well as other key risk stakeholders, see p84 'Governance'.

Policy, framework, processes and tools

Our policy, framework and supporting guidance outline our commitment to managing risk and set what we consider to be the minimum standards. These can be tailored by a business area as long as they align with the policy. The process is assessed during the annual effectiveness review, covered in more detail on p84 in 'Governance'.

Appetite and tolerance

Pearson leadership sets the target risk appetite for each risk they own, validated by the Audit Committee and Board. Understanding the degree of risk the Board will accept determines the most appropriate risk treatment.

For example, a legal or compliance risk has a low target appetite where we try to eliminate risk as much as we can. Whereas a business transformation risk is often also a strategic opportunity and likely to have a higher appetite, where we would take well-informed and well-managed risks to achieve our goals.

Working with third-parties

The use of third-parties (for example, suppliers or partnerships) can create risk, such as an interruption to operations or an impact on reputation. In 2017, we drafted a third-party risk management policy. We also created risk identification questions to help us flag areas requiring investigation. Questions cover principal risks as well as material issues, e.g. environmental matters and respect for human rights, as described in 'Sustainability' on p24–33. This process is being rolled out in phases as part the implementation of a new procurement system.

Managing risk

Our approach to managing risk has remained consistent with our approach in 2016.

Context

The risk context sets the criteria against which risks are identified and assessed. It defines the external and internal parameters to be taken into account, as well as the scope of the risk management process.

The risk management policy, framework and supporting guidance set out how to manage risks, such as determining probability and impact as well as instructions on how to translate these into an overall risk rating. Adaptations of these matrices, tailored for a specific business area, are in use and align with the policy.

Risk management

Assessment

At least twice a year, the ERM team facilitates a risk assessment process through discussions with leadership, senior management and key stakeholders from each business area. For each risk, the probability of it materialising and its potential impact is rated. The adequacy of action plans to address any remaining control gaps is then assessed.

We do this for both new risks identified as well as those already being monitored. Horizon scanning also takes place throughout the year to aid in the identification of new risks.

Treatment

Once assessed, the most appropriate course of action for each risk is decided, taking into account the size of the gap that needs to be closed between its current status versus its risk appetite target. This can include 'avoid' (e.g. not doing something); implementing mitigation or contingency plans to change the probability or reduce the impact of a risk; accepting increasing risk in order to pursue an opportunity; or sharing the risk with another party or parties.

Monitoring and review

Reports are submitted to the Board and Audit Committee bi-annually. This gives them the opportunity to review, challenge and validate the ERM process and key risks. The reports cover current risk status as well as an update on risk mitigation initiatives and their effectiveness. Discussions focus on where there is either a) the greatest change in rating or b) the biggest gap between current rating and the target appetite, with the emphasis on the strength of mitigation plans in place. The risk maps for each business area are also included in these reports.

Risk deep dives also take place at the Audit Committee throughout the year. In 2017, some of the risks covered included business transformation, data privacy and security (including GDPR), tax and treasury. You can read the details in the Chairman of the Audit Committee's report on p76–78.

Culture

The ERM framework is also used to drive the integration of risk management approaches into the culture of the organisation.

Communication, training, education and awareness

Our Code of Conduct remained in place throughout 2017 to drive ethical behaviours across the organisation. The ERM team is committed to raising awareness among employees on the importance of better managing their day-to-day risks. In 2017, the team regularly attended leadership and team meetings to highlight best practice and conducted specific training events.

Embedding risk in decision-making

A key focus area for the ERM team in 2017 was the further embedding of risk management across the wider organisation to support the business in making risk aware decisions.

All Pearson business functions continued to maintain their own risk map, with the spotlight in 2017 on the robustness of the mitigation plans. Business functions follow the same framework for identifying, assessing, treating and monitoring risk. Each identified risk is also assigned a risk appetite target. This work underpins the assessment of the company-wide risks. 2017 saw greater ownership and extension of risk processes by individual business areas.

Continuous improvement

At the end of 2014, we reviewed our current risk management maturity against this risk framework and set maturity targets for the following three years.

In 2018 we will be implementing a more integrated approach to assurance across Pearson (based on a model which outlines the different levels of assurance responsibilities from business management through to external audit and oversight), as well as updating our framework to ensure it continues to align with the 2017 update of the COSO ERM standard.

Principal risks and uncertainties

The Board of Directors confirms that throughout 2017 they undertook a robust assessment of the principal risks facing the company, in accordance with provision C.2.1 of the 2016 UK Corporate Governance Code.

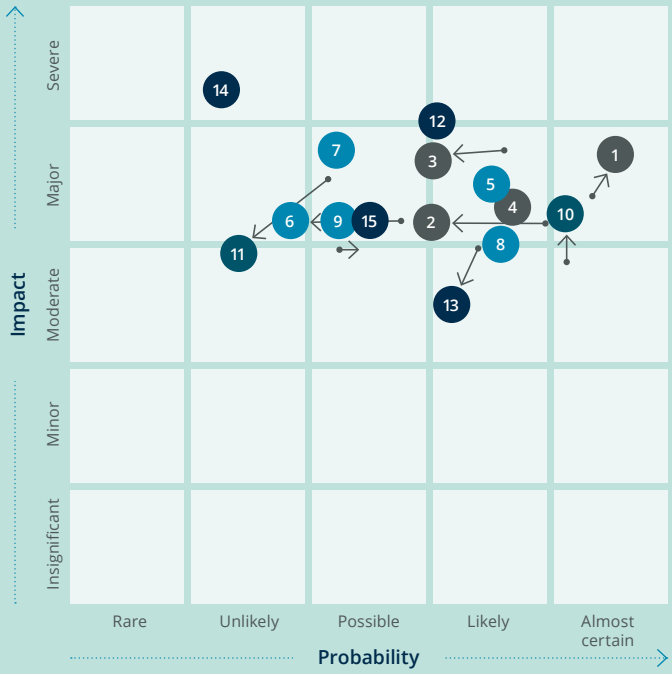
Our principal risks
(as of 31 December 2017)

Listed in the table below (and shown on the adjacent risk map) are the most significant risks that may affect Pearson's future. A longer list of company-wide risks, plus emerging risks, was monitored and reviewed throughout the year. The most material of these are identified as principal risks. Principal risks are those which have a higher probability and significant impact on strategy, reputation or operations, or a financial impact greater than £50m.

The full impact of the UK's pending departure from the EU (Brexit) is still unclear, but we remain vigilant to potentially material risks for Pearson. Work continued throughout 2017 (led by a Steering Committee chaired by the CFO) to identify and mitigate any potential impact on (a) our principal risks below, such as treasury, tax or data privacy, or (b) other areas such as UK-EU supply chain and workforce mobility, including in the event of a 'no deal' exit scenario. We continue to believe that Brexit, in whatever form it takes, will not have a material adverse impact on Pearson as a whole.

The following principal risks also relate to the material issues considered in the 2017 sustainability report: products and services, testing failure, political and regulatory risk, data privacy, information security, customer digital experience, and safety and corporate security. You can read more in the Sustainability section on p24–33.

Principal risks: status and 2017 change



Key

0

Net risk Probability and impact are based on residual risk, i.e. after taking into account controls already in place and assumed to be operating effectively.

Indicates change in 2017

For more information see principal risks and uncertainties tables p51–60.

Risks are categorised into four main areas:

			Executive responsibility
Strategy & change Relating to the goals that support our strategy. This category is the most likely to contain 'opportunity' risks which typically have a higher risk appetite	1	**Business transformation and change**	Chief Executive Officer
	2	**Products and services**	President, Global Product
	3	**Talent**	Chief Human Resources Officer
	4	**Political and regulatory risk**	Chief Corporate Affairs and Global Marketing Officer
Operational Involving people, systems and processes	5	**Testing failure**	President, Assessments President, UK & Core Markets
	6	**Health and safety**	Chief Human Resources Officer
	7	**Safeguarding**	President, Assessments
	8	**Customer digital experience**	President, Global Product & Chief Technology and Operations Officer
	9	**Corporate security and business resilience**	Chief Financial Officer
Financial Involving financial planning, investments, budgeting, potential losses of and exposures to Pearson's assets	10	**Tax**	Chief Financial Officer
	11	**Treasury**	Chief Financial Officer
Legal & compliance Relating to the adherence to applicable laws and regulations. Risks in this category typically have a very low risk appetite.	12	**Data privacy and information security**	Chief Technology and Operations Officer & General Counsel
	13	**Intellectual property and rights, permissions and royalties**	General Counsel
	14	**Compliance**	General Counsel
	15	**Competition law**	General Counsel

Principal risks and uncertainties

Strategy & change

1 Business transformation and change

The pace and scope of our business transformation initiatives increase our execution risk that benefits may not be fully realised, costs may increase, or that our business as usual activities may be impacted and do not perform in line with expectations.

Incorporates 'Data quality and integrity' risk: Unavailability of timely complete and accurate data limits informed decision-making and increases risk of non-compliance with legal, regulatory and reporting requirements.

↑ Increase in impact and probability

Existing controls

- Transformation programme office
- Global learning platform (GLP) and the enabling programme (TEP) are standing Audit Committee agenda items. See 'Governance' p76–77
- Regular updates with Pearson Executive
- Executive owned Steering Committees in place
- Independent assurance on key programmes

Outcome of 2017 activities

In 2017, we continued to invest in the digital transformation and simplification of the company. The volume and accelerated pace of change combined with execution interdependencies as we go into 2018 are keeping this our highest rated (and slightly increased) risk. We also have capabilities we need to continue to develop internally to deliver transformation and change (See Talent risk on p52).

The £300m 2017-2019 cost efficiency programme remains on track to achieve its targets. Following the planning phase culminating in the August 2017 announcement, the programme transitioned to implementation.

HR Fusion, part of TEP, successfully went live in the US in June 2017. Significant progress was also made regarding data governance as our quality focus and scope expanded in 2017 to global data. We now have a much more top-down view of product data, moving on to sales, marketing, rights and royalties and fulfilment. We also started putting in place customer data governance.

2018 outlook and plans

Business transformation and change initiatives will continue to support our strategic goals to accelerate our digital transition in higher education, to manage the print decline, and to reshape our portfolio, as outlined by our Chief Executive on p8–10 and covered in more detail under our strategy in action on p14–21.

In 2018, we will continue with the development of the GLP, a single, cloud-based platform to support learners and our digital transformation, as well as the next phase of TEP to further progress the simplification of our business. Both programmes will continue to be closely monitored by the Audit Committee at each meeting (you can read more about their oversight of key programmes in the report from the Chair of the Audit Committee on p76–77).

Successful execution of all our change programmes in 2018 will depend on having the right change management skills (see also Talent risk on p52).

The focus on data quality in 2018 will be supporting the TEP North America implementation. In addition, the new EU data privacy law, the General Data Protection Regulation (GDPR) which will apply from May 2018 and spans all of our underlying systems, is a priority.

Principal risks and uncertainties

Strategy & change

2 Products and services

Failure to accelerate our shift to digital by developing and delivering (to time and quality) market leading global products and services that will have the biggest impact on learners and drive growth; ensuring Pearson offers products to market at the right price and with a deal structure that remains competitive as well as supports our strategy.

Decrease in probability

Existing controls

- Global product lifecycle process
- Portfolio management
- Audit Committee oversight of GLP

Outcome of 2017 activities

Successfully managing this risk underpins two of our key strategic priorities – growing our market share through digital transformation plus investing in structural growth opportunities (see p14–17).

The likelihood of this risk occurring reduced in 2017 due to the progress we've made towards implementing portfolio management practices and strategic investment recommendations, as well as on pricing strategy and governance in US higher education courseware.

In 2017, we progressed our understanding of the competitive and structural threats, especially to our courseware business in terms of general and student buying behaviour and have taken steps to mitigate these. For example, we are making good progress in shifting the business from ownership to 'pay for use', we reduced the price of a number of eBook rentals and also launched a print rental programme to give greater convenience and value to students.

2018 outlook and plans

Turning this risk into an opportunity – successfully accelerating our shift to digital as well as investing in and delivering the right products and services – is as key to successful business performance in 2018 as it was in 2017. A new Chief Strategy Officer joined at the start of 2018 see p63.

We will continue to improve the US higher education courseware integrated business strategy, product lifecycle and governance, as well as pricing strategy. In addition to the development of GLP, we are investing in other innovations, such as Artificial Intelligence, to ensure our products stay relevant and to become more agile in our delivery. We are also prioritising investment in our fastest growing businesses across Pearson. See p16–17 in Strategy in action.

Market research and analysis activity across Pearson was centralised into one Global Insights team in January 2018. Their remit is to develop customer insights to inform portfolio, product, channel and business strategy.

3 Talent

Failure to attract, retain and develop staff, including adapting to new skill sets required to run the business.

Decrease in probability

Existing controls

- Consistent performance, talent and succession management processes
- Employee policies including the Code of Conduct (see p27 in Sustainability)
- Employee engagement forums and action plans
- Turnover data monitored on a monthly basis
- Exit interviews conducted and monitored globally to identify any trends and concerns
- Learning programmes now offered on a single platform for all staff (Pearson U)
- Revamped external careers website and talent acquisition approach to improve attraction of digital skills
- Wide range of employee benefits

Outcome of 2017 activities

The likelihood of this risk occurring has reduced due to the mitigation activities successfully implemented in 2017. However, talent remains an ongoing priority for the company, with a focus on building the talent needed to deliver the business strategy for 2020 especially in key areas such as digital and change management skills.

Work was undertaken to ensure we have clarity on the key capabilities required to achieve our 2020 goals, using this to support learning and development, assessment, development and talent attraction.

Throughout 2017, there was a strong focus on leadership communication of the Pearson strategy, as well as increased visibility of the Pearson Executive and leadership teams.

Employee engagement action plans communicated across Pearson and the Executive are reporting progress to the Board on a quarterly basis. Highlights from these plans are listed on p27 in the Sustainability section.

An organisational health survey was conducted, and results and action plan shared in Q4.

Our platform for learning and development was upgraded in 2017, increasing accessibility to learning and development solutions and greater flexibility in goal-setting. Academies were also launched for leadership teams as well as Technology, Product, Marketing and Finance. These aim to increase both our capabilities and retention.

2018 outlook and plans

Pearson will implement further programmes to improve connection with the Pearson strategy, and to increase engagement and organisational health.

In order to build the talent we need to deliver the 2020 business strategy, there will additional focus on direct sourcing and construction of targeted talent pools to target skills (digital), address succession gaps, and increase diversity in leadership roles. We will also continue to support change activities through Change Leadership training and handbooks.

In 2018, there will be a stronger focus on development planning linked to further roll-out of career workshops. We will expand and upgrade Pearson U learning, launching new Sales Academy and leadership programmes that support succession planning and increase retention. We will also further refine the careers website to increase employee attraction.

The Pearson Executive will maintain their focus in 2018 on talent actions for the senior leadership group and succession through quarterly reviews.

Principal risks and uncertainties

Strategy & change

4 Political and regulatory risk

Changes in policy and/or regulations have the potential to impact business models and/or decisions across all markets.

Existing controls

- Board and Executive oversight
- Government relationship teams
- EU referendum Steering Committee

Outcome of 2017 activities

Although there has been no overall change in the risk rating, significant work has been done to ensure we can more proactively identify and mitigate political and regulatory risk.

Over the last two years, there has been a specific focus on leveraging resources across the US and UK to build global political/regulatory relationships, and an international political profile in order to understand future international risks and proactively mitigate them.

In the UK, 2017 was the year that GCSEs began their changeover from grades A*-G to 9-1 with English and Maths. Our focus was on working with government, regulator and other awarding organisations to demonstrate the professionalism and solidity of the system, which resulted in a stable set of results.

In the US, we continued to implement our ten priority state strategy engaging with new and existing office holders in key states and worked to shape the state and federal regulatory and legislative environment in favour of Pearson strengths. This work focused on Pearson solutions to affordability and access with stakeholders in Congress, the Administration and priority state capitals.

The full impact of the UK's pending departure from the EU is still unclear, but we remain vigilant to potentially material risks for Pearson. Work continued throughout 2017 (led by a Steering Committee chaired by the CFO) to identify and mitigate any potential impacts on our principal risks below, such as treasury, tax or data privacy, or on other areas such as UK-EU supply chain and workforce mobility, including in the event of a 'no deal' exit scenario. We continue to believe that Brexit, in whatever form it takes, will not have a material adverse impact on Pearson as a whole.

2018 outlook and plans

Pearson will continue to position itself as a leader in the education space, an innovator in higher education and establish the company as a key engine in workforce development and economic growth. We are also driving opportunities to engage directly with other businesses.

In the UK, there is ongoing concern about the amount of testing (and the sheer difficulty of the new tests) in primary schools. As a test administrator, we are mitigating this through a stakeholder outreach programme on assessment. In addition:

- The new 9-1 GCSEs will be awarded in almost all subjects
- Technical education: as the government becomes more clear about the role of T Levels we will need ongoing government relations, media and thought leadership work.

Across our educational markets in 2018, we believe the trend for more intrusive and voluminous regulation in our sector will continue. We will continue our work from 2016 and 2017 to mitigate this.

We will continue to assess the potential impacts of the UK's decision to leave the EU as the model that will replace our membership becomes clearer.

Principal risks and uncertainties

Operational

5 Testing failure

Failure to deliver tests and assessments and other related contractual requirements because of operational or technology issues, resulting in negative publicity impacting our brand and reputation.

Existing controls

We seek to minimise the risk of a breakdown in our student marking systems with the use of:

- Robust quality assurance procedures and controls
- Oversight of contract performance Investment in technology, project management and skills development of our people, including software security controls, system monitoring, pre-deployment testing, change controls and the use of root cause analysis procedures to learn from incidents and prevent recurrence
- Use of Amazon Web Services (AWS) in Clinical and Schools
- IBM counter-fraud tool.

Outcome of 2017 activities

Pearson is an education content, assessment and related services company and, as such, managing this risk remains a priority.

In the US, the majority of student testing is now conducted via AWS, resulting in improved availability and stability.

In the UK, we successfully delivered the UK summer exam series in 2017 to a high standard of quality.

2018 outlook and plans

The drive to continue improvements to availability and stability of testing systems continues. The migration and retirement of legacy systems in use will continue.

Given the high stakes nature of the UK testing business, there remains a risk of breaches of security either as a result of error or of a malicious nature. We are reviewing what additional measures we can put in place for 2018 to further mitigate against potential question paper security breaches.

The plan to upgrade Pearson's bespoke online marking system – ePEN – in the UK will continue throughout 2018 with full implementation due by the end of 2019, taking into account the complexity of our systems as well as external marking contract obligations.

Clinical's Q-global will be moving to AWS in Q1 of 2018. Additional technology stack updates will be implemented during 2018 to address 2017 issues.

6 Health and safety

Failure to adequately protect the health, safety and wellbeing of our employees, learners and other stakeholders from harm could adversely impact our reputation.

This risk previously incorporated Corporate security which is now part of risk 9 'Corporate security and business resilience'.

↓ Decrease in probability

Existing controls

- Global health and safety (H&S) team
- Global policy and standards
- Global assurance and incident reporting system
- Audit programme
- Regional training

Outcome of 2017 activities

The likelihood of this risk occurring has decreased as a result of the outcomes of the following:

- Overall implementation status of Pearson's H&S minimum standards continues to improve globally
- The 2017 global H&S audit programme was completed across a wide range of our locations
- Our global H&S coordinator role has been formalised with a new terms of reference
- The global H&S team became a registered centre to teach the globally recognised Institution of Occupational Safety and Health (IOSH), Managing Safely course
- A completely revised global H&S Policy (with improved governance and responsibilities) and standards have been developed, which now include good practice goals, recognising the H&S maturity in many of our key markets
- Good progress was made across our 15–17 H&S Strategy.

2018 outlook and plans

- Implement the new global H&S Policy and standards and continue to improve the application of our H&S standards
- Refine and Implement a new 18–20 H&S Strategy
- Deliver the IOSH Managing Safely course to our global H&S coordinators
- Review our H&S systems to ensure they continually evolve to reflect our changing business
- Enhance our global assurance programme to not only provide risk-based auditing of key locations, but to also include advisory reviews and focused risk-based H&S Projects
- Continue to evolve our key risk reduction programmes covering:
  - Ergonomics
  - Occupational Road Risk
  - Occupational health risk management and wellbeing

Principal risks and uncertainties

Operational

7 Safeguarding

Failure to adequately protect children and learners, particularly in our direct delivery businesses.

Existing controls

- Safeguarding policy
- Internal procedures and controls
- Staff Code of Conduct
- Third-party risk management policy
- Safeguarding Steering Committee
- Local safeguarding coordinators

Outcome of 2017 activities

We continue to view safeguarding as a fundamental obligation to our learners and a high priority. Although the risk has been reduced due to our disposal of the majority of our direct delivery businesses, we are exposed to greater online risk as we move to more digital services. There is never a zero risk of a safeguarding incident and organisations should always challenge themselves and look to improve their practice. Hence the overall risk remains the same.

An exercise was conducted to test the response of selected businesses to an online safeguarding issue regarding a member of staff, the results of which were used to further refine training and awareness, ready for implementation in 2018.

A sexual harassment policy for our further education business has been developed and currently training is being produced to support its implementation in Q2 2018.

2018 outlook and plans

We will continue to develop and question our practices around safeguarding in 2018, with a focus on ongoing training and awareness across the business, especially with regard to online safeguarding.

We will also further refine our safeguarding metrics and the system used for reporting, as well as developing and implementing a system for external validation of our safeguarding practice.

8 Customer digital experience

Challenges with reliability and availability of customer facing systems could result in incidents of poor customer digital experience and impact our customer service responsiveness.

Existing controls

- Real-time monitoring of systems (for service disruptions) and reporting of operational performance used to identify issues
- Project management disciplines in place to ensure enhancements and new products meet required standards

Outcome of 2017 activities

Managing this risk is critical to achieving our strategic goal of accelerating our shift to digital products and services, and, crucially, becoming a trusted partner. Therefore this risk remains high, despite the significant improvements in 2017 to our product stability and execution.

Mitigations were put in place to prevent a recurrence of the 2016 back-to-school (BTS) issues experienced by customers. BTS stability in the second half of 2017 was significantly improved, resulting in only a few minor incidents and the highest availability levels seen in the last three years.

Further investment was made in 2017 in our global learning platform (GLP). You can read more on this and how it underpins our strategy and the learning experience in 'Our strategy in action' section on p14–15.

Customer support also improved response times for incoming calls and improved outgoing customer communications during the recent outages.

2018 outlook and plans

In 2018, there will be a continued focus on the performance, stability and usability of all product platforms as well as customer service quality and responsiveness.

Our GLP development, critical to our digital transformation strategy, will continue in 2018, with the first pilots due to go live. This platform will allow us to innovate faster as well as better support our learners.

Principal risks and uncertainties

Operational

9 Corporate security and business resilience

Corporate security: Failure to ensure security for our staff, learners, assets and reputation, due to increasing numbers of and variety of local and global threats.

Business resilience: Failure to plan for or prevent incidents at any of our locations. Incident management and technology disaster recovery (DR) plans may not be comprehensive across the whole Group.

Risk definition has changed from 'business continuity' in 2016 and now incorporates corporate security, previously reported as part of risk 6 'Health and safety'.

Existing controls

- Security and resilience policies
- Security minimum protection standards
- Incident management process
- Resilience governance Steering Committee
- Incident management and DR teams
- Global notification and incident reporting tools
- ISO audit programme
- PQS & VUE – ISO 22301 accredited

Outcome of 2017 activities

There were an increased number of incidents in 2017, which fortunately did not impact Pearson directly.

- Continued work across the 'Top 40' locations for planning, testing and response
- Increased collaboration across the organisation, improving understanding of current and future risks, particularly regarding incident response and DR planning
- Training of global incident management teams for different response levels
- A mass notification system was deployed in the UK and will be further deployed globally during 2018 in order to better communicate with our staff and confirm their safety during an incident
- We strengthened our travel security programme, including greater support provision for higher risk trips
- In physical security, the security policy and global property guidelines were released in early 2017, and contain advice and direction for all projects involving the build, refurbishment and disposal of properties. Security reviews in specific locations resulted in a reduction of risks and therefore improvements for staff and learners.

2018 outlook and plans

In 2018, we will:

- Continue to drive security as a proactive rather than reactive activity, with ongoing physical and travel security reviews
- Refine the incident response model towards a broader regional/geographic response
- Continue work on the sustainable and data specific roll-out of the Everbridge mass notification system
- Mandate travel security training for travel to high risk countries (due for deployment in February)
- Work to refine DR planning for any legacy systems and applications, as well as our support of the GLP, TEP and the £300m 2017-2019 cost efficiency programmes
- Grow our knowledge around cloud-based technologies and implement future digital resilience.

Principal risks and uncertainties

Financial

10 Tax

Legislative change caused by the OECD Base Erosion and Profit Shifting initiative, the UK exit from the EU, other tax reform or domestic government initiatives, potentially in response to the ongoing EU anti-tax abuse activities, results in a higher effective tax rate, double taxation and/or negative reputational impact.

↑ Increase in impact

Existing controls

Our tax strategy reflects our business strategy and the locations and financing needs of our operations. In common with many companies, we seek to manage our tax affairs to protect value for our shareholders, in line with our broader fiduciary duties. We do not seek to avoid tax by the use of 'tax havens' or by transactions that we would not fully disclose to a tax authority. We are guided by our taxation principles, which include complying with all relevant laws, including claiming available tax incentives and exemptions that are available to all market participants.

Oversight of the tax strategy is within the remit of the Audit Committee, which receives a report and risk deep dive on this topic at least once a year (see p78 for details). The CFO is responsible for tax strategy; the conduct of our tax affairs and the management of tax risk are delegated to a global team of tax professionals.

Outcome of 2017 activities

This risk increased in 2017 due to the US tax reform changes legislated in December and the announcement in November of the European Commission opening decision on the United Kingdom Controlled Foreign Companies exemption [see note 34, contingent liabilities on p175).

In August the Audit Committee received an update on our tax strategy and approved our first tax report which was published in September. A further update was given to the Audit Committee and Board in December mainly focusing on the impact of US tax reform.

US tax reform is not expected to have a material impact on our effective tax rate, however we continue to work through the detail and assess whether any changes to our strategy are appropriate.

The outcome of Brexit remains insufficiently clear to assess any impact on tax but we continue to monitor.

2018 outlook and plans

We will continue to assess (and implement mitigation plans if required) US legislation changes as well as monitoring potential tax law changes globally, along with Brexit implications and the State Aid situation.

2018 will see the publication of our second tax report.

Media and public scrutiny on tax issues will continue to be actively monitored by group tax and corporate affairs.

11 Treasury

Failure to manage treasury financial risks e.g. debt repayments, key corporate ratios, counterparty risk, rising interest rates and transactional FX exposure.

↓ Decrease in impact and probability

Controls

- Treasury policy (see note 19 starting on p156)
- The treasury strategy and policy is also subject to an Audit Committee risk 'deep dive'. See p78

Outcome of 2017 activities

Overall treasury risk has reduced over 2017 due to a proactive exercise to reduce gross debt and strengthen our balance sheet which has had a direct impact on refinancing, counterparty and interest rate risk.

Pearson has no debt maturities in 2018. We anticipate that cash from operations, our existing cash balances and cash equivalents, together with availability under our existing credit facility, and cash from operations, will be sufficient to fund our operations for at least the next 12 months.

Pearson maintains investment grade credit ratings with Moody's and Standard and Poor's which facilitate good access to capital markets. These credit ratings in February 2018 were Baa2 (negative outlook) with Moody's and BBB (negative outlook) with Standard and Poor's. The negative outlooks reflect perceived business risk as the business transforms, particularly in US Higher Education.

See note 19 starting on p156 for more information on credit, counterparty, interest rate and transactional FX activities in 2017.

2018 outlook and plans

In 2018, we will continue to operate in line with our treasury policy. More on this can be found in note 19, starting on p156.

Principal risks and uncertainties

Legal & compliance

12 Data privacy and information security

Risk of a data privacy incident or other failure to comply with data privacy regulations and standards, and/or a weakness in information security, including a failure to prevent or detect a malicious attack on our systems, could result in a major data privacy or confidentiality breach causing reputational damage, damage to the student experience, lack of compliance and financial loss.

Existing controls

- Information Security and Data Privacy Offices
- Privacy impact assessment process
- Regular audits
- Automated tools
- Annual data privacy training and awareness week
- Risk management framework
- Vendor oversight
- Audit Committee risk 'deep dive'. See p78

Outcome of 2017 activities

Risks concerning cyber-security and data privacy remain high due to complex external factors.

We now have clarity on the increased regulatory obligations and their impact on Pearson, such as the new EU data privacy law, the General Data Protection Regulation (GDPR) which will apply from May 2018 and introduce more onerous privacy obligations and more stringent penalties for non-compliance. The UK's departure from the EU is also adding another layer of uncertainty with regard to the regulator, and customers are also demanding more from us in terms of data privacy (e.g. GDPR and data sovereignty).

We continued to roll out our GDPR programme in 2017; our work to improve the security of our critical products; as well as our privacy impact assessment process for new vendors and programmes.

Many information security risks previously identified have been addressed, plus there was increased vendor oversight in 2017. However, ongoing assessments uncover new vulnerabilities and risk areas arising from increasingly sophisticated attack strategies, as well as Pearson's ongoing transition to digital products, services and cloud adoption.

In 2017, the information security team focused on an improvement programme for critical applications, core platforms and infrastructure to enable Pearson's digitisation and simplification strategy. In addition, we also instituted a programme to review our top vendor contracts to ensure they have the most up-to-date data privacy and information security wording and that they align with GDPR where relevant.

2018 outlook and plans

The Data Privacy Office continues to monitor developments relating to the UK's departure from the EU and, where necessary, adapt to any new UK specific privacy developments. As Pearson operates across several EU Member States, we will still need to comply with GDPR when the UK leaves the EU.

The information security team will continue to drive security maturity (and also thus security compliance to GDPR, PCI, HIPAA, FERPA and other regulatory requirements). A new risk management tool has been deployed so that security risk accountability can be cascaded effectively.

We are conducting an inventory of what personal and other sensitive data we hold and where in the organisation to better focus our resources and attention.

Joint data privacy and information security activities to build security and privacy controls into the design critical products (including the new global learning platform) will continue.

Increased vendor oversight is a critical initiative for security and broad compliance.

Principal risks and uncertainties

Legal & compliance

13 Intellectual property and rights, permissions and royalties

Failure to adequately manage, procure, register or protect intellectual property (IP) rights (including patents and general copyright) in our brands, content and technology or to prevent unauthorised printing and distribution of books and digital piracy may prevent us from enforcing our rights which will reduce our sales and/or erode our revenues.

Failure to obtain permissions, or to comply with the terms of permissions, for copyrighted or otherwise protected materials such as photos resulting in potential litigation; risk of authors alleging improper calculations or payments of royalties.

↓ Decrease in probability

Existing controls

- Policies in place to manage and protect our IP
- Global trademark monitoring platform
- Cooperation with trade associations
- Monitoring of technology and legal advances
- Patent programme in place
- Establishment of Anti-piracy Committee
- Legal department provides ongoing monitoring and enforcement of print and digital copyright piracy

Outcome of 2017 activities

Overall risk has reduced due to careful litigation management, the continued negotiation of preferred vendor agreements, as well as the ongoing work to implement a new rights and royalties system which will further mitigate this risk. We started our phased implementation of this system in the UK in 2017.

We established an Anti-piracy Committee to manage piracy related risk in a coordinated manner. We conduct internet monitoring, takedown and internet 'search result' scrubbing to reduce digital piracy. We have also worked with our larger North America channel partners to adopt best-practice anti-counterfeit measures.

In 2017, we launched patent management technology to further improve our asset tracking, as well as implementing a global trademark monitoring platform to improve visibility of potential infringement threats.

2018 outlook and plans

We will continue to streamline our portfolios; procure and register expanded rights in our high value IP globally, including aggressively expanding our patent portfolio; monitor activities and regulations; and proactively enforce our rights, taking necessary legal action.

We will continue to implement the newly developed royalty and business practices, along with the new rights management system across the US and Canada during 2018.

A new author agreement is being rolled out in the first half of 2018.

14 Compliance

Failure to effectively manage risks associated with compliance (global and local legislation), including failure to vet third-parties, resulting in reputational harm, anti-bribery and corruption (ABC) liability, or sanctions violations.

Expanded from the previously reported anti-bribery and corruption risk.

Existing controls

- Audit Committee oversight
- ABC policy certification
- Internal procedures and controls
- Risk-based third-party due diligence
- Employee and business partner codes of conduct (see also 'Respect for human rights' under Sustainability on p28)
- Local Compliance Officers (LCOs)

Outcome of 2017 activities

Internal procedures, controls and training continue to mature, which are designed to prevent corruption. Pearson's Code of Conduct was refreshed and rolled out for all employee certification in September 2017, including references to ABC policy and requirements (also discussed under 'Sustainability on p28). Pearson's ABC policy reflects our zero tolerance towards bribery and corruption of any kind by establishing a consistent set of expectations and requirements regarding ABC for all our personnel and business partners to adhere to.

Pearson's 2016 ABC programme self-assessment served as a roadmap for work for 2017-2018. Progress was made on ABC risk assessments of the various regional and local business units.

We conducted due diligence on our highest risk third-parties and developed roll-out plans for further phases.

Pearson's ABC infrastructure includes a network of LCOs based in country, mainly members of the legal team. This programme continues to be successful with greater knowledge and competencies of the LCOs and better leadership, guidance and helpful tools and resources provided by the global compliance office.

2018 outlook and plans

In 2018, we will:

- Implement a comprehensive plan for risk-based roll-out of further ABC third-party due diligence, including new tools and resources
- Roll out a comprehensive refresh of the training programme on ABC and Code of Conduct globally
- Continue risk assessments in 2018 to ensure that the ABC programme reflects local market and business model risks, as well as plan actions to remediate issues revealed during those assessments
- Employ a more robust analytic framework to our investigative data to spot trends and root causes.

Principal risks and uncertainties

Legal & compliance

15 Competition law

Failure to comply with anti-trust and competition legislation could result in costly legal proceedings and/or adversely impact our reputation.

↑ Increase in probability

Existing controls

- Global policy published
- Training and guidance
- Regular internal communications
- Lawyer network

Outcome of 2017 activities

This risk increased during 2017, reflecting our participation in industry associations, including Board membership, as well as the recent activity of associations being challenged by anti-trust authorities such as in Spain.

A global policy, general training and guidance were launched in 2017 and contain all the measures, indicators and actions required to ensure anti-trust and competition compliance.

A lawyer network was launched in 2017 and training has taken place to improve their expertise around competition/anti-trust laws. An increasing number of employees have also been trained. All employees will need to be certified.

2018 outlook and plans

Training, including e-learning modules, is being further expanded in 2018 with metrics being developed to track engagement. The lawyer network is contributing more data to feed into training and risk assessment indicators.

Risk assessment of prospects and viability

This section should be read together with the full viability statement on p106.

Pearson's principal risks and our ability to manage them as outlined above are linked to our viability as a company. These risks have therefore been taken into account when preparing the viability statement.

The Board assessed the prospects of the company over a three-year period, longer than the minimum 12 months of the annual going concern review. The three-year period corresponds with Pearson's strategic planning process and represents the time over which the company can reasonably predict market dynamics and the likely impact of additions to the product portfolio.

The Board discusses the company's strategic plan on an annual basis taking account of a range of factors, including market conditions, the principal risks to the Group above, product and capital investment levels as well as available funding. Pearson's strategy and business model are discussed in more detail on p14–21.

The key assumptions which underpin our three-year strategic plan to December 2020 are as follows:

- Implementation of our 2017-2019 cost efficiency programme reducing our annualised cost base exiting 2019 by c.£300m
- Increased investment in the product technology platform to accelerate the shift to digital and enhance courseware service capabilities
- Further declines in enrolments and other downwards pressures in the US higher education courseware market
- US higher education courseware returns rates continue to improve as the previous inventory correction continues to unwind and sales become more direct to consumers
- Online Program Management grows, driven by global enrolment in undergraduate and post-graduate online courses
- US assessment revenues stabilise
- Other strategic priorities, including Online Blended Learning and Professional Certification, show modest growth.

In assessing the company's viability for the three years to December 2020, the Board analysed a variety of downside scenarios, including a scenario where the company is impacted by all principal risks. The primary modelling overlaid a 'severe but plausible' downside scenario onto the base case strategic plan for Pearson, focusing on the impact of the following assumptions and key risks:

- Failure to materialise anticipated benefits of our 2017-2019 cost efficiency programme
- Increased declines in enrolments and further channel disruption in US higher education courseware
- Failure to accelerate our shift to digital while successfully investing and delivering market leading global products and services
- Online Program Management fails to generate expected revenue growth
- US assessment revenues fail to stabilise
- Other strategic priorities, including Online Blended Learning and Professional Certification, do not achieve modest growth amid global economic uncertainty and local market pressures.

The Board also stress-tested the impact on our liquidity of all the principal risks occurring together. Although this is not regarded as a plausible scenario, the test showed that the company would still have liquid resources subject to a limited number of management actions.

The Board's confirmation of Pearson's viability for the three years to 2020, based on this assessment, is included alongside the going concern statement on p106.