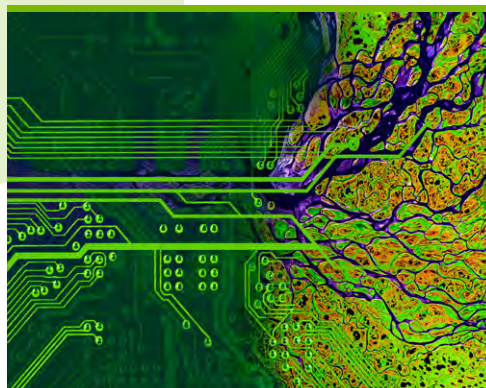


Building pathways
to discovery

CHAMPIONING PROGRESS



CONTENTS



Advancing trustworthy knowledge

- 4 Opening doors to discovery
- 5 Chair's introduction
- 6 CEO's introduction
- 8 In the spotlight:
Chief Scientific Officer




Connecting global networks

- 10 Our history
- 11 Our network in numbers
- 12 Our business
- 13 Education
- 14 Research
 - Introduction
 - Driving progress through technology
 - In the spotlight: SNAPP
 - In the spotlight: *Nature*
- 20 Health
- 21 Professional
- 22 In the spotlight: open access



Presenting our progress

- 27 Group financial review
- 29 Segment reviews
 - Research in 2022
 - Education in 2022
 - In the spotlight: *Advancing Futures*
 - Health in 2022
 - Professional in 2022
- 36 People
- 39 Sustainability
- 41 Governance
- 43 Group outlook



ADVANCING TRUSTWORTHY KNOWLEDGE

In a time of rapid technological change, scientific progress and increasing misinformation, the world needs certainty. We're committed to providing dependable, authoritative content that is transparent and unquestionably accurate.

In this section

- 4 Opening doors to discovery
- 5 Chair's introduction
- 6 CEO's introduction
- 8 In the spotlight: Chief Scientific Officer

OPENING DOORS TO DISCOVERY

Springer Nature has always been passionate about the new.

New discoveries that shed light on human existence and the world around us.

New ways of working that bring these research findings, across all disciplines and formats, to light.

New technologies that have the potential to promote equity, preserve integrity and accelerate discovery further.

With an unshakeable commitment to quality and openness, we are turning the pages of research to advance discovery and help find solutions for society's big challenges.

**TRUST
MATTERS**

In a time of rapid technological change and scientific progress, the world needs certainty.

That's why we are committed to providing dependable, trustworthy and authoritative content and data across all our well-known brands, which is transparent and unquestionably accurate. By upholding these values and a strong focus on safety and ethics, we will continue to earn the trust of the many communities we serve.

95%
of our customers
agree we publish 'rigorous research that can be trusted'

**KNOWLEDGE
WITHOUT
BOUNDARIES**

Solving the planet's big challenges requires teamwork, cross-disciplinary thinking and openness.

That's why we aim to offer a home for all research across our wide portfolio of books and journals. Partnership, diversity and a commitment to open research are central to our endeavours and, we believe, key to unlocking the mysteries of our universe.

7.9m downloads
per day
in 2022

**CURIOSITY
DRIVES
PROGRESS**

If innovation is the beating heart of our business, then curiosity is the air we breathe.

We have always been curious by nature, asking questions, trying new things and rejoicing in the different. We are excited by the potential that AI and technology provide to accelerate discovery, promote equity and protect integrity and trust.

1.25m+
open access articles
published to date

CHAIR'S INTRODUCTION

“

At the core of Springer Nature is our support for the people in our research and education communities – they are the bridge builders of human understanding.



ADVANCING SCIENCE THROUGH GLOBAL COLLABORATION

Springer Nature is part of a wonderful global community which we are privileged to serve. Thus, one of my great joys of 2022 was, after years of restriction, to visit our offices around the world. I saw how our colleagues are dedicated with their hearts and minds to our purpose and to our partners, especially in these demanding macroeconomic and political times which come with inflation, a significant rise in energy costs and supply chain risks for everyone.

Russia's attack on Ukraine, geopolitical shifts and ideological polarisation on the one side and the rising influence of AI – if left to bad actors – on the other side, mean that errors or even misinformation are a growing problem. But good decision making and knowledge building based on facts is more

important than ever. I am therefore very proud of our colleagues' unfaltering commitment to ensure trustworthy content of the highest quality standards. Their oversight, supported by innovative technologies, as well as ensuring cross-border intellectual collaboration around the world, is key to this success. They also stand for sharing content – whether that be text, data or a methodology – widely and regardless of race, gender, religion or nationality, for the benefit of all. At the core of Springer Nature is our support for the people in our research and education communities – they are the bridge builders of human understanding. Together with us they keep the doors open to cross-disciplinary collaboration and to views that challenge the way we think. Both are critical if we want to deal with the big challenges we are facing today, while taking advantage of the latest scientific breakthroughs in the future.

The positive, constructive feedback from our customers coupled with a genuine team spirit enable us to paint a robustly optimistic picture despite our caution about the actual state of the global economy. There are inspiring advances in crucial areas from renewable energy to the treatment of major diseases as well as a significant increase in

the number and in the usage of our books and articles in support of the UN Sustainable Development Goals (SDGs). We continue to drive open access forward relentlessly and remain committed to finding ways of making publishing more equitable. Almost €20 million of fees were waived for authors in financial need in 2022. We use AI to facilitate easier and better translation services for non-native English speakers and are on target to achieve our ambitious internal and external goals, when it comes to diversity, equity and inclusion. In this regard, I was especially pleased to see how we opened the special issue of *Nature*, Racism: overcoming science's toxic legacy (read it [here](#)), to guest editors from diverse backgrounds. To change the world for the better, you need true engagement and openness, and that was a very good example of it. There are many more to come.

A handwritten signature in black ink, appearing to read 'Stefan - Holtzbrinck'.

STEFAN VON HOLTZBRINCK

Chair
Springer Nature Group

CEO'S INTRODUCTION



Our new content related to the sustainable development goals – an area where we are a leader – grew strongly, to more than 93,000 articles and books.



INCREASING THE GLOBAL VISIBILITY OF RESEARCH

Research is the key element in helping solve the world's biggest challenges, from tackling hunger, to addressing the impacts of climate change. At Springer Nature, our role is to make sure the research we publish has global visibility, opening doors to discovery. We do this through our trusted brands and talented people, and by working in partnership with our communities across the research ecosystem.

I'm proud of how our people pursued this mission in 2022. We continued to advance the transition to open access (OA), making the latest verified insights freely available to an ever-greater audience. More than 38% of our primary research articles were published OA, and we're on track to meet our goal of 50% by the end of 2024. Our new content related to the sustainable development goals – an area

where we are a leader – grew strongly, to more than 93,000 articles and books. At the same time, we continued to provide value to our research communities, and upheld our reputation and promise of integrity, which are our greatest assets.

TRANSFORMING ACCESS

To accelerate the shift to OA at scale, we have pioneered new solutions such as transformative agreements (TAs), which enable funders and institutions to cover OA publishing costs and subscription access for their affiliated researchers. In 2022, we signed 11 new national TAs, including our first in Latin America and Canada, and we now support authors from more than 3,500 institutions globally, delivering OA equity for all researchers regardless of discipline. We are excited about the potential of these agreements, and believe they are the best way to deliver open access, the enabler of open science, on a large scale. In countries where we've had TAs in place for a number of years, such as the UK, the visibility of research has increased significantly. Citations have also increased, which shows that it's not only the public benefitting from greater access, but researchers too, building on existing discoveries.

SAFEGUARDING THE INTEGRITY OF SCIENCE

Opening up science means little if the published research is not trusted. Over the past few years, our industry has been challenged by those who seek to undermine the integrity of the research process. We have always prided ourselves on our trustworthiness, and we're investing in our technology and our teams, and tightening our policies on article acceptance, to make sure our high standards are maintained. However, we know we can't do this alone – trust in the research system is only as strong as its weakest link. We are working closely with our peers in the industry to tackle the problem, supporting the STM Integrity Hub, where we share information, knowledge and tools for the benefit of the entire academic publishing ecosystem.



We have always prided ourselves on our trustworthiness, and we're investing in our technology and our teams, and tightening our policies on article acceptance, to make sure our high standards are maintained.

USING AI AND HUMAN OVERSIGHT TO DRIVE PROGRESS

We're already using artificial intelligence as a tool to help us protect the integrity of science. And we're deploying AI in other ways too, from translation and editing solutions, for those for whom English is not their first language, to helping researchers to find information more quickly and editors to find the most suitable peer reviewers. We also see significant potential in using AI to help make research more understandable to the general public. However, we recognise the need for safeguards, and drawing on expertise throughout the company our AI Safety and Ethics Board has developed a set of principles to guide our activity. And we are clear that decisions about the final article still rests with our human editors. The same broader point is true for science itself – one of the most important aspects of scientific discovery is serendipity, and for that you need people.

SUPPORTING OUR PEOPLE

We are, above all, a people business, and we try to support our colleagues whenever there is a need. In 2022, as the cost of living increased, we made additional payments to more than 6,000 of our global employees below an income cap in countries with high inflation. We also increased our spending on training and development, including on diversity, equity and inclusion, which remains a high priority for us. We're working hard to improve gender, race and geographic representation, so that our leadership represents our status as a global business.


ACHIEVING OUR FINANCIAL GOALS

Turning the focus to the economy, 2022 was a volatile year, with sharp rises in interest rates around the world, affecting growth. However, the effect on our business was limited, because our industry is, to a large extent, resilient to economic downturns

as investment in research and learning continues. Our research business, led by our Nature Portfolio, and our books, performed strongly, while our education segment rebounded as schooling returned to normal after the pandemic. This enabled us to achieve our revenue goals, increase our profits – enabling significant investments in technology and people – and reduce our leverage. We remain a very robust company with a strong balance sheet.

OUR INTERCONNECTED WORLD

The year was another reminder of how interconnected the world is. The easing of the pandemic restrictions globally allowed us to visit faraway colleagues face-to-face. However, Russia's invasion of Ukraine, which we strongly condemned, was a major setback for the peaceful international order and we supported humanitarian relief efforts in Ukraine and suspended new sales and marketing activities in Russia and Belarus. The war is now in its second year, and the negative effects have spread far beyond Europe. Research can only truly thrive in a stable global environment where countries trust each other.



WE'RE ON TRACK TO MEET OUR GOAL OF 50% OA ARTICLES

LOOKING AHEAD

Despite these challenges, we remain positive about the future, and undimmed in our commitment to breaking down barriers to knowledge. In 2023, we've continued to invest in our publication systems for authors, our editorial outreach programmes, and the development of our colleagues, to ensure the latest discoveries are shared and used for the good of all people, and the planet.

FRANK VRANCKEN PEETERS

Chief Executive Officer
Springer Nature Group

IN THE SPOTLIGHT

RITU DHAND CHIEF SCIENTIFIC OFFICER



If it were not for the academic editors we would not be here.

Working with our editorial community

Behind every piece of research we publish is a team of talented, dedicated editors. We work with more than 90,000 external academic editors, who act as champions for their subjects and custodians of the scientific record, building successful journals and books for their communities. They dedicate their time and expertise to helping authors improve their manuscripts, and ensure the work commands the highest levels of quality and integrity.

“If it were not for the academic editors we would not be here”, says Ritu Dhand, our Chief Scientific Officer, who has been both a researcher, and an editor at *Nature*.

We are extremely grateful to our editors, and support them with tools, services and a broad range of training, from the fundamentals to more specialist topics, like finding suitable peer reviewers and raising a journal’s profile. But we are committed to doing more. A big part of Ritu’s role, which she started in 2022, is representing

our editors: listening to them and then, working with the editorial engagement team and the journal publishers, finding ways to better support and recognise their contribution.

In 2022, we started an editorial engagement pilot programme, working closely with a group of journals. As part of this, we launched the Editor of Distinction Awards to celebrate outstanding work. We’re also looking at how editors are presented on journal homepages and published papers. “It gives me great pride to see the amazing work that’s going on, and to be able to say thank you for it”, says Ritu.

For the journals in the pilot programme, we’ve also provided a helpdesk for our editors and editorial board members, additional support where workloads are high, and launched a series of events to update editors on topical issues. In 2023 and beyond, we’ll be exploring how to use AI responsibly to provide even more support to editors, from making science more comprehensible, to verifying technical results and identifying anomalies in manuscripts.





CONNECTING GLOBAL NETWORKS

We support and add value to research through our vast interconnected ecosystems, using technology to accelerate discovery for the benefit of authors, the academic community and society as a whole.

In this section

- | | | | |
|----|---------------------------------------|----|-------------------------------|
| 10 | Our history | 20 | Health |
| 11 | Our network in numbers | 21 | Professional |
| 12 | Our business | 22 | In the spotlight: open access |
| 13 | Education | | |
| 14 | Research | | |
| | – Introduction | | |
| | – Driving progress through technology | | |
| | – In the spotlight: SNAPP | | |
| | – In the spotlight: <i>Nature</i> | | |

OUR HISTORY

At Springer Nature, we place great pride in our heritage. Our story began in 1842, when Julius Springer founded a bookstore and publishing house in Berlin. At first, Springer focused on political publishing, but quickly expanded into journals and books about the natural sciences, engineering and medicine, helping pave the way for the modern knowledge-based society. By the early 1900s, Springer was the world's second biggest academic publisher, with a contributor roster including Albert Einstein.

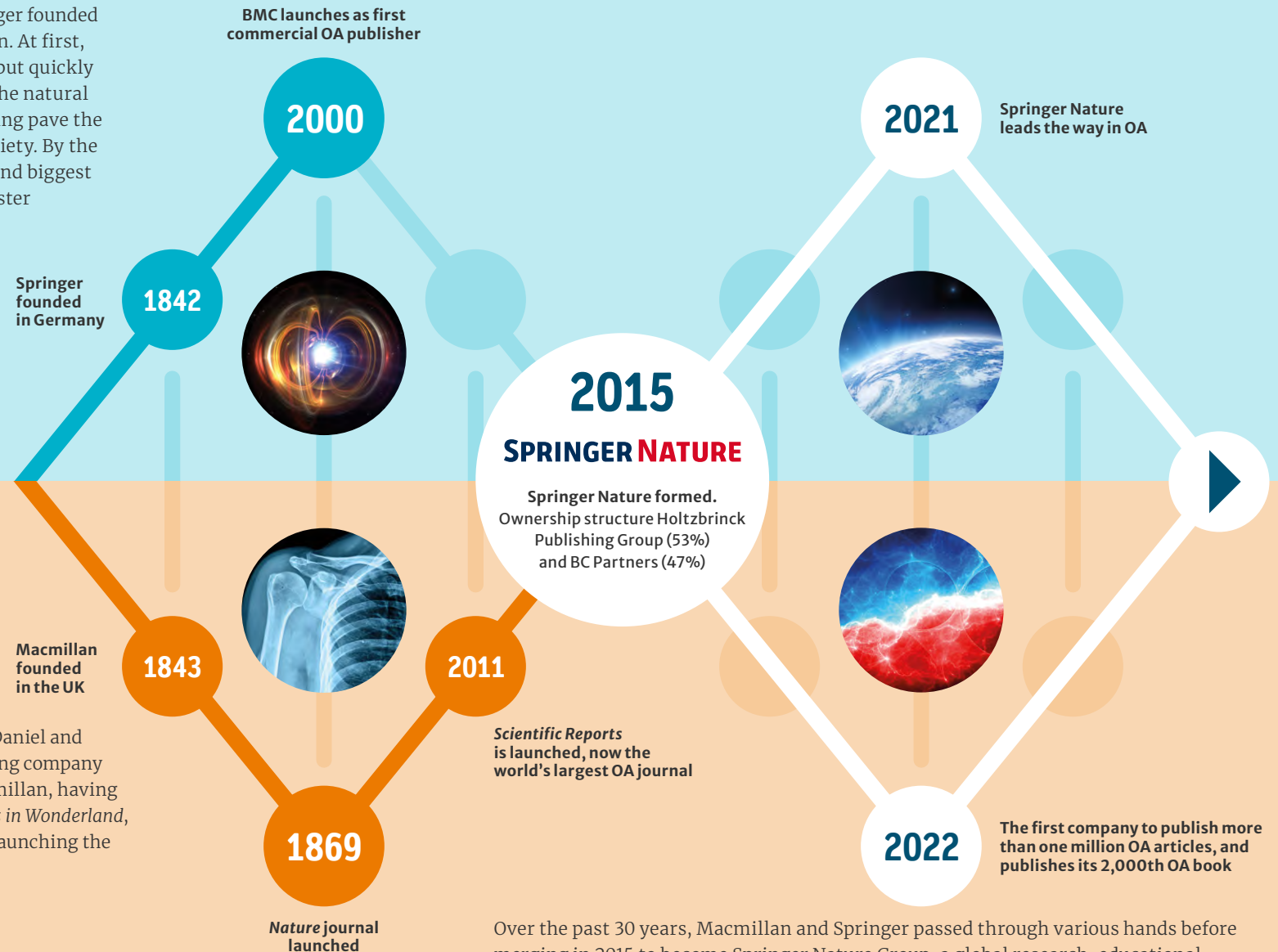
SPRINGER

KEEPING SCIENCE
MOVING FOR
**180
YEARS**

MACMILLAN

In London in 1843, two Scottish brothers, Daniel and Alexander Macmillan, launched a publishing company to promote great writing. Meanwhile Macmillan, having published Lewis Carroll's *Alice's Adventures in Wonderland*, had broadened its business into learning, launching the scientific journal *Nature* in 1869.

Throughout the 20th century, both Springer and Macmillan became renowned for publishing groundbreaking research that changed our understanding of the world, from work on radioactive substances, to the discovery of the structure of DNA, and a paper describing Dolly the sheep, the first mammal to be cloned from an adult cell.



Over the past 30 years, Macmillan and Springer passed through various hands before merging in 2015 to become Springer Nature Group, a global research, educational, health and professional publisher, with headquarters in Berlin.

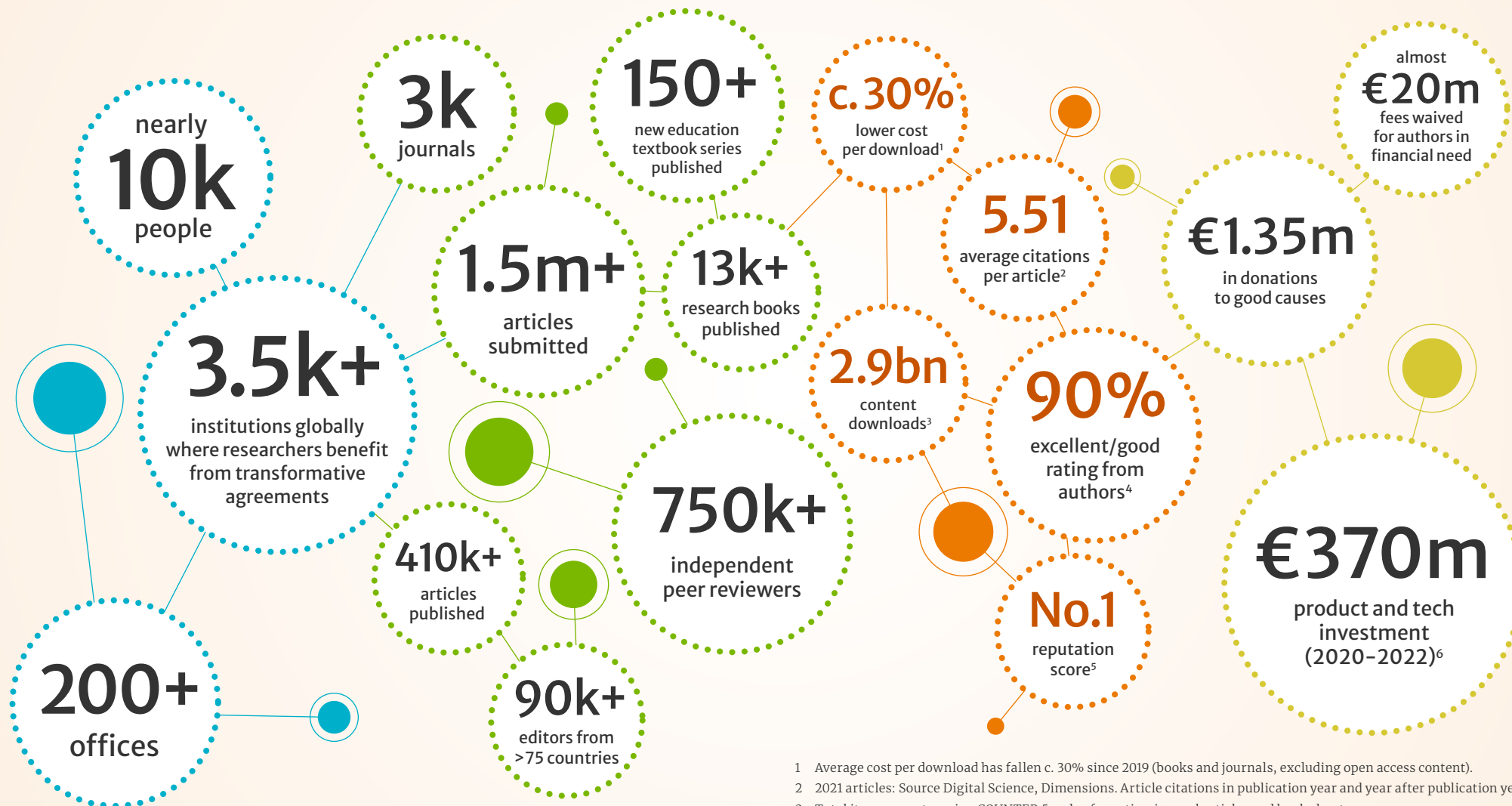
OUR NETWORK IN NUMBERS

We're a global business operating at a local level

We publish trustworthy information with extensive reach

We add value to researchers

We invest for our communities



2022 figures, except where otherwise stated.

- 1 Average cost per download has fallen c. 30% since 2019 (books and journals, excluding open access content).
- 2 2021 articles: Source Digital Science, Dimensions. Article citations in publication year and year after publication year.
- 3 Total item requests, using COUNTER 5 code of practice, journal articles and book chapters.
- 4 Journal authors, CSAT score. Proportion of authors rating publishing experience excellent or good.
- 5 Yonder Reputation Credit Score of 806/1,000, the most positive score among industry peer group.
- 6 Includes IT-related operational spend.

OUR BUSINESS

The pursuit of knowledge is a lifelong journey. At Springer Nature we're with you every step of the way, using our trusted brands, the talent of our people and advanced technologies to provide verified insights that are easy to find, understand, use and build on.

In the research community, we build deep connections with authors and bring global visibility to their work. Through our partnerships with editors, peer reviewers and experts in our vast ecosystem, and using the latest innovations, we evaluate, quality assure, improve and publish new discoveries, many of which are free to access as we move closer to open research. This helps researchers

uncover fresh ideas, advancing progress for the next generation.

In schools we inspire curious minds through our textbooks and online learning materials. We also provide educators with the tools to teach some of the world's most widely spoken languages.

In the workplace, we help put discoveries to use, through our publications and services that make the latest research accessible and understandable to clinicians, engineers and other professionals, for the benefit of society. And our prestigious magazines inspire wonder among a wide variety of audiences, from specialists to the general public.

OUR ACQUISITION OF CUREUS

In December 2022, we acquired the Cureus Journal of Medical Science. Using its innovative business model, Cureus enables peer-reviewed articles by medical professionals, who often don't have access to research grant funds, to be published open access (OA). With this focus on publishing clinical research by and for physicians and medical practitioners, Cureus joined Springer Healthcare, Springer Medizin and Bohn Stafleu van Loghum, as part of our health division. Cureus has a growing monthly audience of more than one million unique readers.

We have four complementary business segments:

EDUCATION

Read more on page 13



RESEARCH

Read more on page 14



HEALTH

Read more on page 20



PROFESSIONAL

Read more on page 21



EDUCATION

For 180 years, Macmillan Education's pioneering spirit and reputation has helped us forge lasting relationships with educators and governments. As education advances ever faster, we are engaging with our global communities to learn more about teachers' and students' evolving needs, introducing new approaches and teaching resources to keep up with the latest technology. We occupy a top three position in most of the markets where we operate.

In our curriculum unit we create high-quality print and digital content, using trusted methodologies and pedagogies, tailored to meet a country's educational needs across all age groups, subjects and in local languages. In pre-primary and primary schools, our English literacy and comprehension materials help make language learning fun, and encourage a love of reading. Our many local maths resources – including print books and eBooks – help students to think mathematically, rather than by rote, while series like Max Science introduce young children to the key concepts of biology, chemistry and physics. All are designed to support the child in developing critical skills on their learning journey. We provide assessment and teachers' guides in English and Spanish, and support and guidance for parents to help their children at home. Teachers also benefit from our professional development and training programmes.

Our English language teaching unit enables millions of students of all ages to improve their language skills to help them succeed in education, in the workplace, and throughout their lives. *Gateway to the World*, a global course that prepares young adults for university entrance exams, combines new content and digital tools with a widely used and successful methodology. Our *Advancing Futures* programme helps teachers introduce topics of global citizenship, sustainability, and diversity, equity and inclusion (DEI) into classrooms. And it engages students with key elements of the SDGs, empowering them to work towards a fairer, more sustainable future.

**120+ COUNTRIES
IN WHICH WE HAVE
A LOCAL PRESENCE**

See how Education performed in 2022
EDUCATION SEGMENT REVIEW >

OUR EDUCATION BRAND



SOME OF OUR PUBLICATIONS



For more information, see our feature
IN THE SPOTLIGHT: ADVANCING FUTURES >

RESEARCH

We work closely with the global academic community to verify, publish and share trustworthy research through a variety of established and innovative digital channels. These insights support the development of new areas of knowledge, to keep science moving.

Our academic journals and books cover advances in science, technology, medicine, the humanities and social sciences, and lead the way on OA. We also provide solutions and advice to authors to help them prepare their research for submission.

OUR JOURNAL BRANDS

We publish some of the world's most influential journals. Our prestigious brands include our flagship *Nature* journal, which in 2022 was named as the first journal to achieve one million citations in a year, the SpringerLink platform and *Scientific Reports*, one of the most highly cited journals globally.

Most researchers and authors choose to publish in titles that bring the highest visibility to their work. Our market-leading range of around 3,000 journals, which includes top-tier OA journals and covers all academic disciplines, and our vast reach, put us in a strong position. We have a home for every piece of sound research, whether the findings make incremental contributions to existing knowledge or significantly advance scientific understanding, whatever the field. Through our close relationships with scientists and policymakers we help to tackle society's most urgent challenges, from climate change to water scarcity. We publish journals and reference works in support of the SDGs.

90% EXCELLENT/
GOOD RATING
FROM AUTHORS

See how Research performed in 2022
[RESEARCH SEGMENT REVIEW >](#)

OUR RESEARCH BRANDS



nature portfolio



SCIENTIFIC
AMERICAN

palgrave
macmillan

For more information, see our feature
[IN THE SPOTLIGHT: OPEN ACCESS >](#)

OUR BOOK BRANDS

As the world's largest academic book publisher in both scope and scale, we provide in-depth reference material in print and increasingly in digital formats, across all scientific disciplines and in areas of applied research. Our portfolio features a wide variety of book types, including monographs, textbooks and major reference works, published through our well-known imprints, like Palgrave Macmillan and Springer. Our range of

OA books and chapters is growing fast and, on average, generates more than twice the number of citations, and 10 times more downloads and online mentions than non-OA books. More than a quarter of our books have a focus on one of the SDGs, and we print on demand to improve sustainability.

OUR PLATFORMS AND SOLUTIONS

In our platform and solutions business unit, we use technology to put the researcher at the centre, supporting the entire research cycle from idea to impact, by providing platforms, products and solutions to maximise the speed, quality and reach of their work.

7.9M DOWNLOADS PER DAY

Our platforms for open research, including [SpringerLink](#) and [nature.com](#), supported 2.9 billion downloads in 2022 – the equivalent of 92 downloads every second – and more than 7.9 million downloads each day. In research solutions, we offer authors valuable support, from AI digital editing and translation, to preprints and training to bolster their career development. Our data and analytics solutions provide data and insights to researchers, funders, librarians, institutional leaders and professionals in the life sciences industries to help them make better decisions. Key products include Nature Research Intelligence, AdisInsight, Springer Nature Experiments and Springer Materials. Content services help researchers find the tools, jobs and insight they need to succeed, and help organisations to attract talent, build their reputation and promote their brand.

OUR CONSUMER MEDIA

We communicate the latest research and insights to the wider public through regionally focused magazines like *Scientific American* and *Spektrum der Wissenschaft*.

SOME OF OUR PUBLICATIONS



OUR MARKET

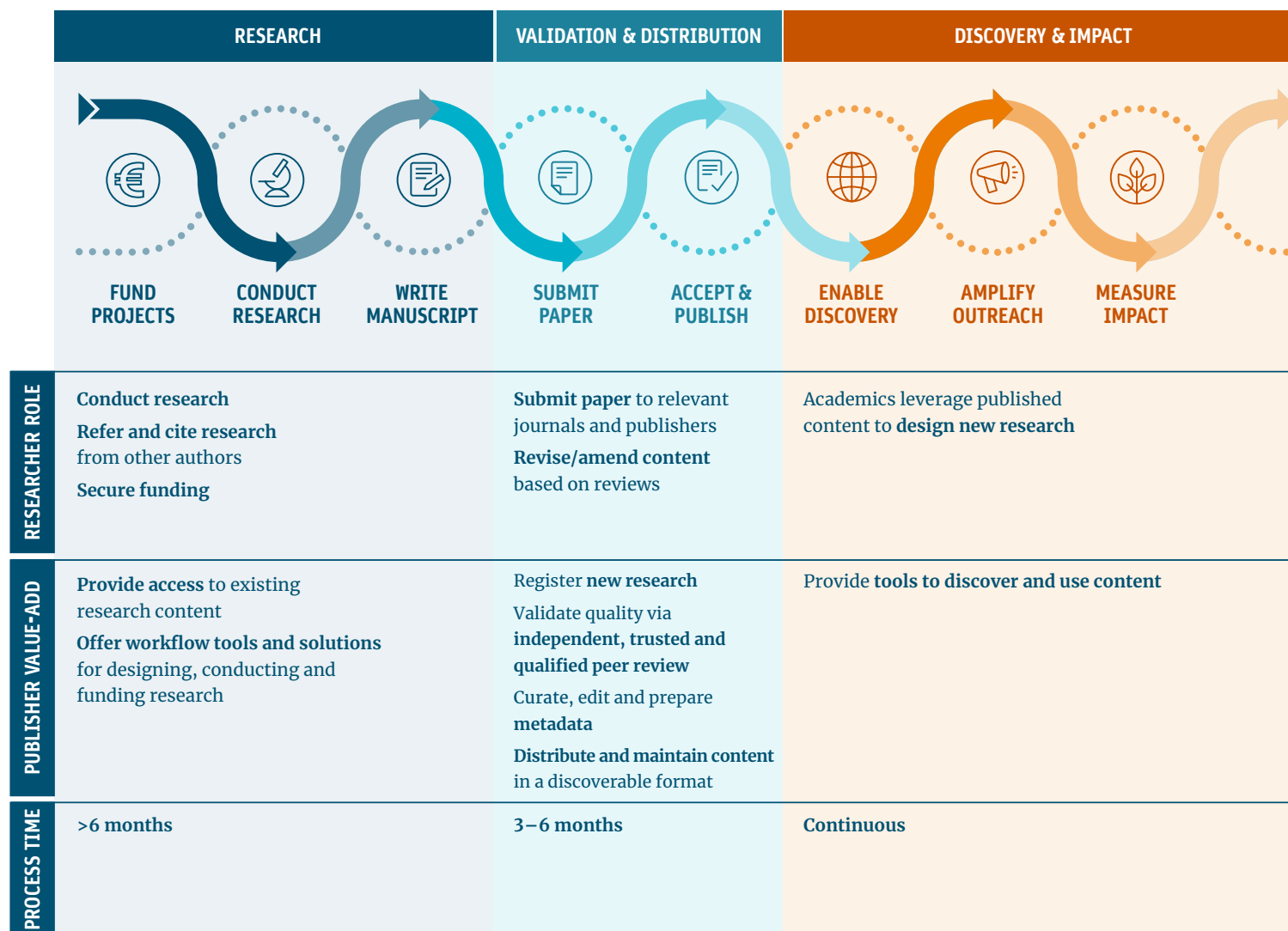
We're one of the leading global research publishers. We are the second biggest by number of publications, and the only one for which publishing research is the major focus of the business. Our main customers are universities (through their academic libraries), government institutions, corporations, individuals and, especially with regards to OA models, research funding bodies including charitable foundations.

OUR NETWORK IN ACTION

At Springer Nature we support and add value throughout the scientific research ecosystem.

In our role as a leading custodian of quality, trust and integrity in research, we work with 750,000 independent peer reviewers and 90,000 editors. Their standards are high and demands stringent. Even when a manuscript is not suitable for a particular journal, our work is often not over. Our transfers desk helps authors whose research doesn't meet the publication criteria for their initial choice of journal, to connect with editors at some of our other titles that may be more suitable. In 2022, around 115,000 articles were supported in this way.

Though we still print books and journals, the vast majority of our output is digital. All published research is uploaded to our platforms, [SpringerLink](#), [nature.com](#) and [biomedcentral.com](#), and tagged with data that makes discovery and sharing easy. Increasingly, this content is published OA, immediately available for all to read and use. We house this work forever, alongside all previously published research, in a giant, dynamic, digital library, ready to be updated as new findings emerge or new technology develops.



DRIVING PROGRESS THROUGH TECHNOLOGY

Technology is central to our ability to deliver value to our communities, helping us accelerate discovery, promote equity in research publishing and protect integrity and trust.

It has already played a role in our success, enabling us to transition earlier than other content industries from print to digital. More than 90% of all our journal content can be accessed digitally, with new online-only journals launched regularly. All our books are available electronically. In our industry-leading Springer Book Archive project, we digitised and put online Springer publications going back to 1842, including seminal works by figures such as Albert Einstein and Marie Curie. It has also enabled us to advance the OA transition by giving us the ability to process thousands of small, individual payments for OA publishing instead of single large library subscriptions.

A FOCUS ON SAFETY AND ETHICS WILL CONTINUE TO GUIDE US

Drawing on expertise from across the company, our AI Safety and Ethics board developed a set of principles:

- We are guided by human values of dignity and respect.
- We are transparent with all our audiences about the decisions and processes AI is supporting.
- Our use of AI is aligned with Springer Nature's commitment to fairness and diversity, equity and inclusion.
- Our AI solutions will be designed and implemented in such a way as to minimise harm.
- We will hold ourselves accountable for our AI systems through transparency and consistent reporting.

We saw during the pandemic how the unprecedented speed and openness with which trusted, peer-reviewed content and data was shared contributed to the rapid development of effective vaccines. Today, we believe that advanced technologies, especially AI, have the potential to yield similar benefits for society, by enabling faster and easier access to trustworthy scientific content. We're using AI tools, deployed alongside human intervention and supervision, to further help the research community. We are:

- **Accelerating discovery** by helping researchers find relevant information more quickly. We're curating data that would have taken humans centuries to collate, and turning that data into books for academics to build on. And we are providing intelligence to institutions to help them get better results.

- **Promoting equity** by helping editors to quickly find the best peer reviewers from the global network of academics, and helping non-native English speaking researchers to improve their science communication and reach new global audiences.
- **Protecting integrity and trust** by increasing our ability to spot fraudulent papers more quickly and effectively. We're using AI to build ever more sophisticated integrity checks to safeguard the scientific record.

The most successful research publishers in the coming years will be those that invest in and develop their technology tools and combine them with the expertise of their staff and their wider network of relationships. That's why, as well as building our own technological solutions, we partner with software companies to benefit from their knowledge and to bring innovations to market quickly.



IN THE SPOTLIGHT



Making publishing faster, simpler and more rewarding for our communities

Since 2019, we've been on an ambitious journey to transform the publishing process as we move towards an open science future. Our investments in innovations and technology are designed to put the author at the centre of publishing, and to improve the experience for the wider editorial and research community.

Developed in-house and with the academic community, the Springer Nature Article Processing Platform, known as SNAPP, provides authors, editors and reviewers with a streamlined, simple-to-use experience, from submission to publication. While the main focus is on the speed of publishing and reducing turnaround times, we're also making our customer service ever better. To help authors find the best journal in our portfolio for their research, SNAPP includes a one-click transfer function, saving time. By connecting to and incorporating many of our other tools and systems, authors can see if they're eligible for open access funding or discounts, and easily make payment.

Technology embedded in SNAPP is helping our people uphold the trustworthiness and quality of our published research. Aided by AI and machine learning, we're able to find the best peer reviewers and editors for a paper. The technology also powers faster and deeper checks on manuscripts for quality and integrity, detecting plagiarism and machine-generated content.

The roll out of SNAPP is gathering pace as we migrate more of our journals to the platform, and authors share their positive experiences. By the end of 2022, 640 journals were on SNAPP. More than 135,000 accepted papers had passed through the system – nearly half of those in the previous 12 months. To ensure we are creating value for all SNAPP users we closely monitor performance, through internal metrics, such as the speed of publishing, as well as real-time customer feedback and after-the-fact surveys. These show that our authors and peer reviewers appreciate the changes made through this platform.

We are working with our editorial community to improve their experience. While more than 33,000 of our academic editors are now using SNAPP, they are still adjusting to it. We're listening closely to what they're saying and working hard to further improve their experiences.

**33K+ EDITORS
USING SNAPP**

IN THE SPOTLIGHT

nature

Since 1869, *Nature*, and later the Nature research journals, have partnered with global researchers to publish findings that significantly advance discovery in a particular field, and have the potential to alter scientific discourse and to be career-defining for the author.

Papers published in *Nature* have much greater reach and impact compared with typical journals, attracting on average 17 times more citations, 27 times more downloads and 29 times more attention.



Authors are supported by an editorial team that really understands their research area and academic community, and work with a dedicated editor who provides rigorous assessment, feedback, advice and guidance. This includes more than 200 professional editors, all with PhDs and research backgrounds, who read and assess more than 70,000 submissions a year.

All this results in research that makes headlines, gets talked about and used. Articles published in 2022, generated more than 152,000 news stories and were mentioned over the past year more than 10 million times on Twitter and more than 18,000 times in policy documents.

Delivering this reach, impact and quality is a huge undertaking. More than 400 people work directly on *Nature* and the Nature research journals, and another 300 provide support from across Springer Nature. To ensure even greater engagement, we're investing in technology, products and services, including the ability to make code and data openly available, and to share findings early as a preprint.

Credit: Alain Herzog / EPFL



During 2022, *Nature Medicine* published research on the effectiveness of implants that enable people with spinal cord injury to walk again.

“

The first few steps were incredible – a dream come true!

A PATIENT INVOLVED IN THE STUDY

HEALTH

We've been providing insights and solutions to doctors, nurses, dentists and pharmacists for nearly 100 years. Through our four business units and strong brands, we advance medical knowledge to improve the diagnostics, treatment and care of patients.

In Germany and the Netherlands we lead the market, with a wide book portfolio and more than 120 journals and periodicals. We provide additional services for healthcare professionals, drawing on our cooperation with more than 200 societies and medical associations. This trusted and expert medical information includes continuing medical education, the latest scientific research and industry news, healthcare policy and practice management.

We also deliver highly relevant clinical and scientific content, strategic medical communications solutions, specialised training programmes and medical education initiatives across the full range of therapeutic areas. Our newest addition is Cureus, a San Francisco-based OA medical journal that we acquired in 2022. Cureus solves the challenge of publishing peer-reviewed articles for medical professionals who don't have access to research grant funds (read more on [page 22](#)).

WE PARTNER WITH 200+ SOCIETIES AND MEDICAL ASSOCIATIONS

See how Health performed in 2022
[HEALTH SEGMENT REVIEW >](#)

OUR HEALTH BRANDS

We reach more than 240,000 registered healthcare professionals worldwide through our brands, including:



A provider of high-quality specialist information and services for all professionals in the German-speaking healthcare sector.



Provides content and services that support the dissemination and education around drug treatment, devices and diagnostics to healthcare professionals around the world.



A leading Dutch brand for publications, learning solutions and services for healthcare professionals and students.

Cureus

A peer-reviewed, OA medical journal leveraging the power of an online community platform to share and promote published medical knowledge.

For more on OA publishing, go to
[IN THE SPOTLIGHT: OPEN ACCESS >](#)

PROFESSIONAL

We deliver knowledge and support to enable professionals to reach their potential. Through our businesses and brands we provide tailored information and services for several markets in Europe, including engineering, business, management and transport.



Our Professional brands include Springer Vieweg, which focuses on content in the areas of technology and applied natural sciences, and Springer Gabler, our imprint for management and business literature. Both German-language brands offer a broad portfolio of products and services including magazines, digital content and events.

In addition, our road safety education business has for many years provided teaching and learning solutions for driving schools in Germany, France, Spain, Austria and Switzerland, through brands like Vogel, Codes Rousseau and Etrasa. The professional transport business also includes publications and events for the logistics, transport and automotive sectors in Germany. As of the second quarter of 2023, this part of the business has been acquired by Swiss asset management company, Unigestion.

See how Professional performed in 2022 [PROFESSIONAL SEGMENT REVIEW >](#)

OUR PROFESSIONAL BRANDS

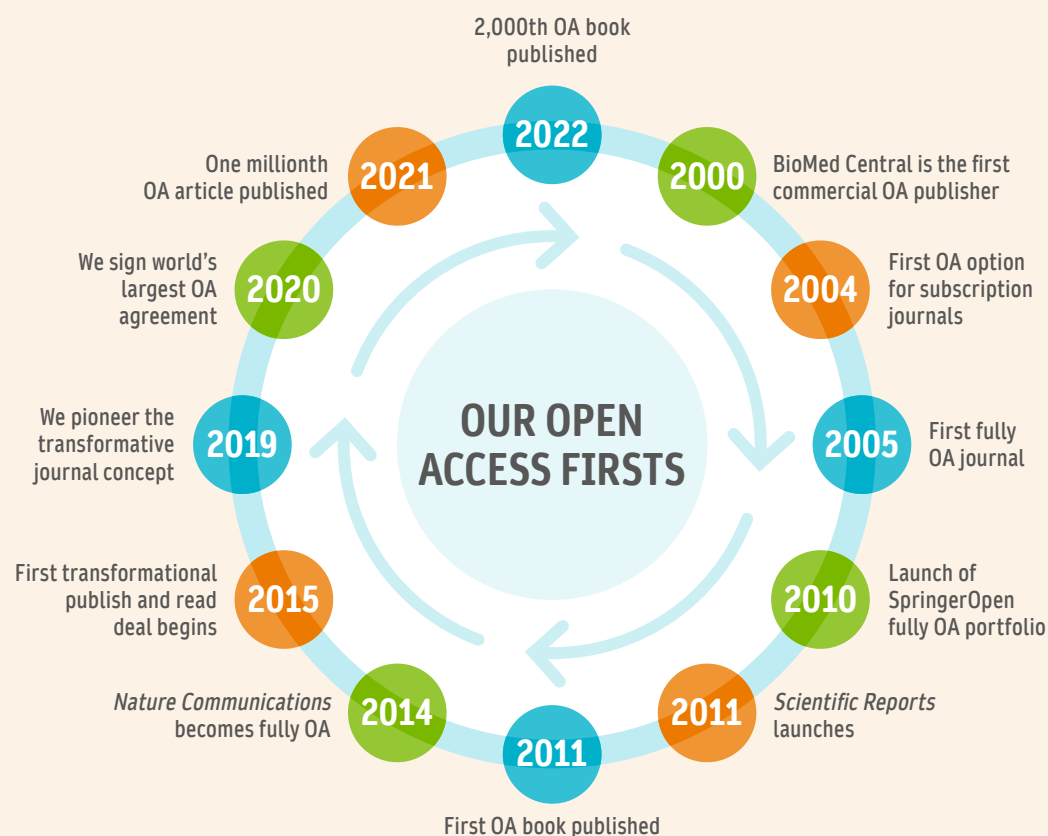
 **Springer** Fachmedien

 **Springer** Vieweg

 **Springer** Gabler

IN THE SPOTLIGHT

OPEN ACCESS



Also in this feature

[OUR EXPANDING TAs](#) PAGE 23 >

[OA IN NUMBERS](#) PAGE 25 >

Transforming access

Science advances fastest, more rigorously and for the widest benefit when it is open: transparent, trustworthy, accessible and available to all to use, reuse and build on. The foundation for this is open access (OA).

At Springer Nature we've been pioneering the transition to OA for more than 20 years, and are committed to making peer-reviewed research immediately and freely available to all. We have many new levers at our disposal to drive this, but at the centre remains our longstanding portfolio of fully OA journals. More people read and use fully OA articles published by Springer Nature than those of our competitors. Among all fully OA publishers, we have the highest average article citation, and researchers publishing with us have their work downloaded up to five times more than with our peers.

Our aim is that by the end of 2024 at least half the primary research articles we publish will be OA – and we're on track to achieve that. We won't stop there. To accelerate the shift to OA, we're investing in technology and AI, building our OA teams, especially in China and India to reflect the growth in research output in those countries, and working closely with institutions and funders globally to make the transition affordable, simple and scalable. Because only by fully opening up all elements of research, from the underlying methodologies and data to the published article, in a sustainable and equitable way, can we realise the benefits of open science and accelerate solutions to society's biggest challenges, from climate change to ending poverty.

OUR TRANSFORMATIVE AGREEMENTS (TAs) SUPPORT AUTHORS FROM MORE THAN 3,500 INSTITUTIONS GLOBALLY

“

We believe that for the general public to understand and have more trust in science, having easy access to research is the first step. We therefore wanted to make sure that everyone can read our work, access and download our data, and study what we did; within a week our paper had been read 32,000 times and almost 80% of our readers belong to the general public!

MELANIE DURING

An author of the first paper published under the new Swedish transformative agreement agreed in 2022.

OUR TAs EXPANDING TO NEW REGIONS

📍 National agreement
📍 Institutional agreement



Australia and
New Zealand
Austria
Canada (FSLN)
Colombia
Czechia

Denmark
Egypt
Finland
Germany (DEAL)
Greece
Hungary

Italy
India (MAHE)
Ireland
Japan
Mexico
Netherlands

Norway
Poland
Portugal
Qatar
Slovakia
South Africa

Spain
Sweden
Switzerland
UK
USA (CDL + MIT)

1 Largest agreement at time of signing.

Changing the business model

The transition to OA is changing the research publishing business model. Under the traditional 'pay to read' model, the costs incurred by publishers are covered by subscriptions, which grant access to the content in our journals, ebooks and searchable databases.

Increasingly, however, funders, researchers and authors don't want research behind a paywall; they prefer it to be immediately accessible by all as soon as it is published and more widely read, cited and discoverable.

With OA publishing we still provide the same high levels of service, from submission to peer review to enhancing discovery of manuscripts. And our same standards for acceptance apply, strictly controlled by our independent editors, ensuring the integrity and trustworthiness of the research we publish. But because the user of the research doesn't pay, the business model is inverted.

Under this 'pay to publish' model, the publishing costs can be met in two main ways. The author, usually through their research funding, pays an individual article processing charge (APC), or, more generally, the cost is covered by a transformative agreement (TA).

Accelerating the transition through TAs

We've been leading the way with TAs since 2014, and believe they are the best means of delivering a fast, cost-neutral and successful shift to OA globally and on a large scale. TAs are typically agreed at a country or consortium level and, for a single fee, enable participating institutions to combine journal subscription access along with OA publication costs. This allows their researchers to read subscription articles and to also publish their research immediately OA in our journals, assuming the work meets our standards, at no extra cost to themselves.

Greater control for institutions

For researchers, TAs free up time, because there is little administration to do. Institutions benefit from greater control through agreed article publication thresholds, and receive tracking and measurement information and performance assessment reports. TAs are sustainable over the long term because they are negotiated and funded.

Improved OA options for researchers

Given their scale, TAs also improve equity, by enabling more researchers to benefit from the enhanced discoverability, increased citation and increased usage of OA content. The agreements allow any researcher from the participating institution, regardless of academic discipline, to publish OA.

The transition to OA is not without its challenges. As publishing submissions grow significantly year-on-year, the integrity of the science must be preserved. We are investing considerable sums in people and technology and working with industry associations and others internationally to understand and manage risks. To ensure equality of publication and access, we are experimenting with different models, as well as being flexible in our approach to meet the different needs of researchers in different geographies and disciplines. While there are now TAs in all continents, there is still some way to go to ensure that researchers from all countries can gain the benefits of publishing within a TA, so we are working with funders to encourage wider roll out of TAs in more countries.

TAs INCREASE VISIBILITY AND USE OF RESEARCH

- Research published within the TA with the Californian Digital Library (CDL) saw usage of this research increase by 180% compared with the period before the TA took effect.
- Our agreement with Jisc in the UK has seen usage of research by UKRI-funded authors increase ten-fold since 2015.

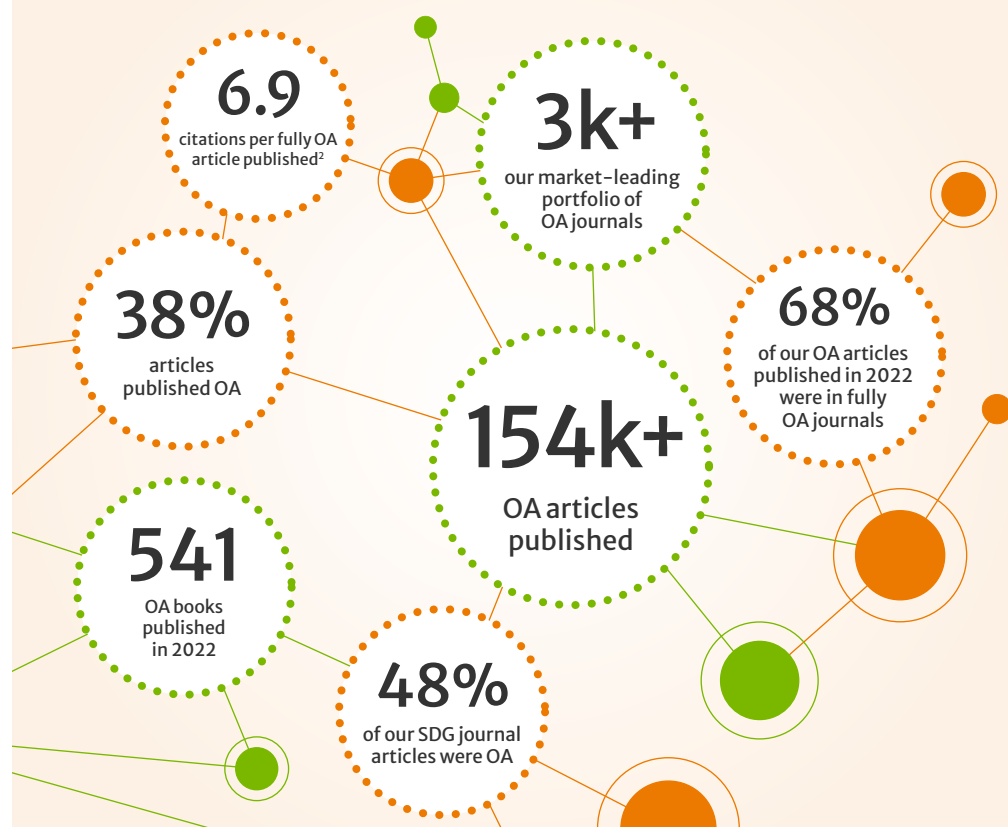
In 2022, the volume of OA research papers published via TAs grew 3x faster than those published outside a TA.

The advantages of OA

Publishing OA offers several benefits to researchers and authors, especially impact and visibility. Journal articles published OA are downloaded (read and used) six times more than those behind paywalls, and are cited (built on by others) 1.6 times more, with many more mentions in news reports. Books published OA are downloaded 10 times more, and cited 2.4 times more, than non-OA books. They have greater international reach – typically being read in 60% more countries than those that are not OA. There is also the satisfaction in knowing that everyone can benefit from the research, now and forever, and that the openness contributes to increasing trust in science.

Acceptance rates are the same for our fully OA and hybrid journals. Decisions about quality remain in the hands of our expert editors, both in-house and from the wider academic community, and independent peer reviewers. Any other approach would be self-defeating because our reputation and the high standards set by our brands are our greatest asset. Authors publish with us so that their work can sit alongside other top-quality research. In our hybrid journals, which are committed to going fully OA, authors have the option to publish either OA or through the subscription model.

OPEN ACCESS IN NUMBERS¹



¹ 2022 figures except where otherwise stated.

² 2021 articles: Source Digital Science, Dimensions. Article citations in publication year and year after publication year. Includes content published in fully OA and transformative journals.

OUR OA PORTFOLIO

We are the most comprehensive OA research publisher, offering the option to publish articles OA in all our journals, across all academic disciplines.

Our fully OA portfolio includes:

- the world's largest fully OA journal, *Scientific Reports*
- around 600 other fully OA journals.

After *Scientific Reports*, our leading fully OA journals in 2022 by downloads were *Nature Communications* and *BMC Public Health*. Our fully OA portfolio has the highest number of total citations (6.9 per article published in 2021) of any publisher.

Our portfolio of transformative or hybrid journals:

- more than 2,200 journals
- more than 30 Nature research journals.



PRESENTING OUR PROGRESS

We had another successful year: meeting our operational and financial goals and maintaining our high levels of investment in technology, our people, and our communities to deliver long-term value for our authors, readers and customers.

In this section

27	Group financial review	36	People
29	Segment reviews	39	Sustainability
	– Research in 2022	41	Governance
	– Education in 2022	43	Group outlook
	– In the spotlight: <i>Advancing Futures</i>		
	– Health in 2022		
	– Professional in 2022		

GROUP FINANCIAL REVIEW

Segment reviews

RESEARCH IN 2022 [PAGE 29 >](#)

EDUCATION IN 2022 [PAGE 32 >](#)

HEALTH IN 2022 [PAGE 34 >](#)

PROFESSIONAL IN 2022 [PAGE 35 >](#)

In a year marked by geopolitical and macroeconomic instability, we again proved our resilience. Led by our research and education segments, we had a successful year. We strengthened our market position in key business segments, delivered more value to our customers and fully met our operational and financial goals.

Unlike many business sectors, academic publishing is not directly tied to the macroeconomic environment or economic cycle. Spending on research, and on learning more generally, continues even in difficult economic times, like those we saw in 2022. Our financial solidity is further enhanced by the stability of our institutional customer base and our shareholders, as well as our robust business model. This all allows us to target stable, profitable growth and long-term value for all our stakeholders, in a sustainable way.

We measure our financial performance using two main indicators – revenue and operating profit – and their underlying trends over time.

In 2022, we achieved underlying Group revenue growth of 5.6%, reaching €1.82 billion, above our expectations. The Education segment continued its post-pandemic recovery, with underlying revenue growth of 22%. Our Research and Professional segments also performed ahead of the market, with both delivering underlying revenue growth of 4%. Revenues were stable in our newly created Health segment, which combines various assets that we had held in other business segments, and gives us greater focus.

Our adjusted operating profit increased to €487 million. This resulted in strong operating cash flow, further enhancing our financial position. We contributed €116 million of corporate income taxes, in countries where we do business, and we used our strong free cash flow generation to further reduce our financial debt and leverage. Our financial performance enabled us to maintain our high investment levels, including €136 million of investment and operating spending on technology and products (read more on [page 28](#)).

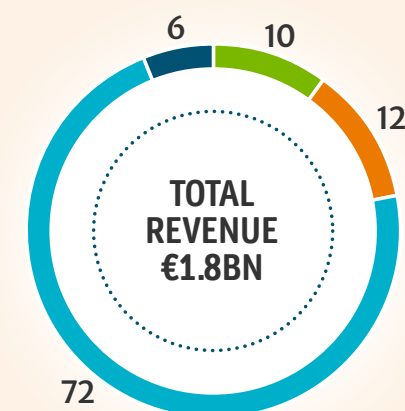
This strong revenue growth and cost management measures were partially offset by an increase in costs due to inflation and supply shortages, especially of paper.

Employee numbers grew by around 500 (net), and cost-of-living payments were provided to more than 6,000 of our employees below an income cap, in countries particularly affected. Marketing and travel costs increased as pandemic restrictions were lifted, and IT costs rose as we filled vacancies with external contractors to accelerate key technology projects to deliver improved products and services for our authors and customers.

STRENGTHENING AND FOCUSING OUR BUSINESS

We acquired several businesses during 2022, including Cureus and Medbee in our Health segment, and Troupant in our Education segment. We increased our investment in Research Square Company to take full ownership, and sold Rendement, a publishing company specialising in business and legal information in the Netherlands.

2022 REVENUE



- % Research
- % Education
- % Health
- % Professional

INVESTING IN EMERGING TECHNOLOGY

Our strong 2022 financial performance enabled us to maintain our high levels of investment in technology to deliver better products, services, solutions, publishing processes and other digital capabilities. This included around €136 million of investment and operating spending in products and technology, taking our total investment in these areas from 2020 to 2022 to more than €370 million.

Our aim is to create a faster, more efficient and user-friendly publishing workflow system. This will help us to provide a superior user experience for our authors, editors, peer reviewers and all those involved in the publishing process. We've continued to invest in our proprietary journal publishing platform, SNAPP, which already hosts 640 of our 3,000 journals (read more on [page 18](#)). We've also significantly grown our technology teams, adding further specialists in AI and machine learning. Our investments in AI tools have already yielded excellent results, from supporting research integrity by identifying plagiarised or otherwise problematic content, to helping editors find the best peer reviewers faster, speeding up the peer review process (read more on [page 17](#)). Nature Research Intelligence, which launched in 2022, uses AI and our people's expertise to bring information and data to decision makers. We will continue

to invest in AI in an ethical and responsible way, for the benefit of our communities.

We're also developing sales, marketing, fulfilment and procurement capabilities based on the latest technologies and cloud-based infrastructure solutions.

INVESTING IN OUR PEOPLE AND OUR COMMUNITIES

Our investments stretch across many other areas of the business too, including our people. In 2022, employee numbers grew by around 500 and we dedicated 60,000 hours to staff training and development. To help with the increased cost of living, we made significant additional payments to employees earning below a certain threshold in high-inflation countries. Our DEI initiatives continue to grow, both within our company, and in our communities, where we created new DEI training resources for authors and editors. Our fully OA journals waived APCs of almost €20 million to authors in financial need in 2022.

We've also expanded our sustainability programmes, rolling out sustainable business training for all our employees, and investing in emission-reducing initiatives, like creating a smarter supply chain at Macmillan Education, by using a regional rather than global print model.

2022 REVENUE

	2020	2021	2022
GROUP			
Revenue (€/millions)	1,626.7	1,700.9	1,821.8
Underlying growth ¹	-3.5%	6.5%	5.6%
Adjusted operating profit (€/millions) ²	396.2	443.4	487.4
Underlying growth ¹	-0.6%	7.5%	6.5%
Operating margin	24%	26%	27%
RESEARCH			
Revenue (€/millions)	1,179.1	1,223.1	1,312.5
Underlying growth ¹		6.0%	4.0%
EDUCATION			
Revenue (€/millions)	175.8	183.8	220.3
Underlying growth ¹		11.3%	22.2%
HEALTH			
Revenue (€/millions)	168.8	183.4	185.6
Underlying growth ¹		4.8%	0.3%
PROFESSIONAL			
Revenue (€/millions)	103.0	110.5	103.5
Underlying growth ¹		7.3%	3.8%

- 1 Underlying growth is defined as year-on-year growth excluding movements in currency exchange rates between the actual and the prior year, changes in the underlying portfolio and accounting changes. Underlying growth figures by segment are not available for 2020 because of the structural change of bringing our Health businesses together in one Health segment.
- 2 Adjusted operating profit, excluding capital gains and losses and any effects occurring outside the ordinary course of business or non-recurring effects. Such effects may relate to gains and losses from the acquisition or disposal of assets or businesses, the integration of assets or businesses, the restructuring of businesses or business units, as well as to other exceptional or non-recurring business transactions or events (adjustments/exceptional items).

RESEARCH IN 2022

Our research segment had another successful year, publishing record amounts of quality research, including more than 410,000 articles and more than 13,200 books.

The high rates of page views, downloads and citations show these insights were widely used and shared, and that we continue to provide value for our authors.

Underlying revenue growth was 4%, outperforming the market and our key peers. This was driven by growth in the Nature Portfolio journals and in our OA business. Academic institutions continued to expand their subscriptions across the Nature Portfolio, and across all key markets. We launched new Nature titles, attracting strong levels of submissions, demonstrating the strength of the brand. Our fully OA portfolio now comprises around 600 journals, and the speed of transition to OA continues to exceed our expectations. *Nature Communications* led the OA growth, along with the medicine and life sciences journals. *Scientific Reports*, our single largest

journal, published more than a fifth of our OA articles, in line with the previous year. Across our journals portfolio, revenues from digital product have remained constant at around 95%.

Our books unit performed strongly, due to increased sales of eBooks and eBook collections, as well as fully OA books. The migration from print to digital formats continued, with 68% of book revenues generated from digital titles, up from 66% in 2021, while print sales declined. We passed the milestone of 2,000 OA books published. Revenues in our solutions business were stable.

Our costs increased due to inflation and higher travel and marketing spend as pandemic restrictions eased.

We increased our investment in Research Square Company (RSC) to take full ownership. RSC comprises American Journal Experts, which provides AI-powered author solutions, and Research Square, a world-leading preprint platform. This strengthens our ability to provide solutions to researchers and will accelerate the move to open science.

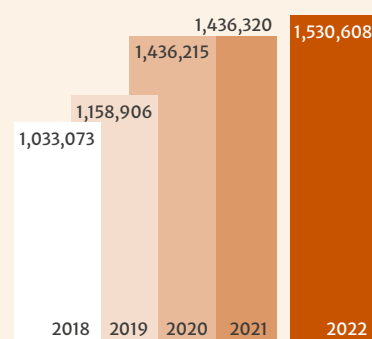


EXPANDING OUR REACH AND TRUST

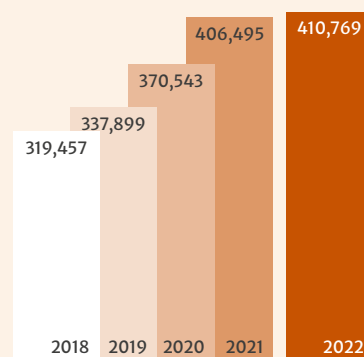
To accelerate solutions, our research needs to reach the widest possible audience. Our journal titles cover more subject areas than any other publisher. We're committed to making publication more equitable for researchers in lower-income countries and in disciplines that are hard to finance. In 2022, our fully OA journals waived fees of almost €20 million to authors in financial need.

Working with the research community, and using the latest AI tools, the research integrity group seeks to ensure all our work meets the highest editorial standards to maintain public trust. In 2022, this group reviewed more than 1,600 cases from the 1.5 million submissions we received, investigating and taking corrective action where required.

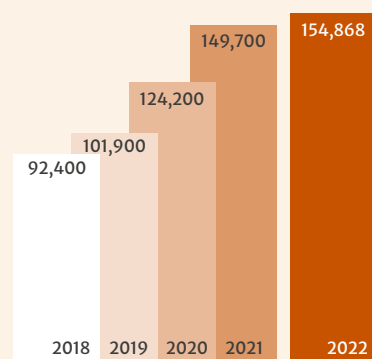
MORE SUBMISSIONS, MORE CONTENT, MORE OPEN ACCESS



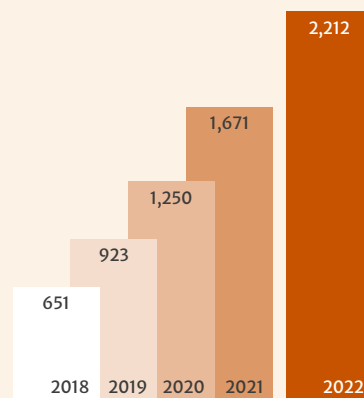
SUBMISSIONS



ARTICLES PUBLISHED



NEW OA ARTICLES PUBLISHED¹



OA BOOKS - TOTAL

In 2022, we extended our track record of processing more submissions, publishing more articles and books and increasing the shift to OA.

¹ Includes research journal and review article content only, published in fully open access journals or within hybrid journals. Excludes editorials and opinion pieces.

OUR IMPACT

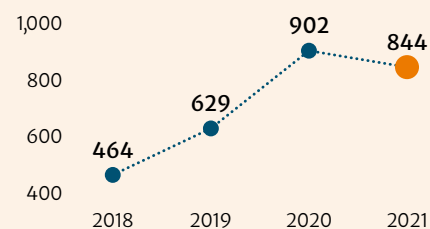
The research we publish is widely used, shared and built on, enabling the research community to collaborate to find solutions to society's biggest challenges.

Downloads and citations have been increasing over recent years, with 2020 being an exceptional year given pandemic-related research.

**AVERAGE COST
PER DOWNLOAD
HAS FALLEN C. 30%
SINCE 2019¹**

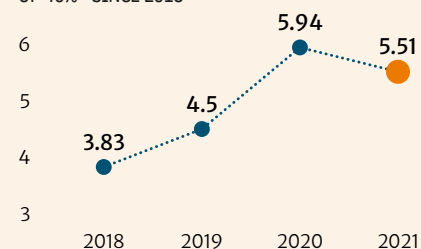
DOWNLOADS PER ARTICLE

UP 80%+ SINCE 2018²



AVERAGE CITATIONS PER ARTICLE

UP 40%+ SINCE 2018³



AVERAGE CITATIONS PER FULLY OA ARTICLE

6.9

the highest
in the industry⁴

38%

more than
closest mixed-
model competitor

19%

more than closest
pure OA competitor

- 1 Books and journals, excluding open access content.
- 2 Total item requests, using COUNTER 5 code of practice.
- 3 Digital Science, Dimensions. Article citations in publication year and year after publication year. Excludes 2022 articles, because 2022 citations not yet complete.
- 4 Digital Science, Dimensions, fully OA articles published in 2021 with average citations in 2021 and 2022 per article.

EDUCATION IN 2022

With most of the pandemic restrictions lifted and children attending school, our Education segment bounced back strongly in 2022.

We saw good growth in nearly all our markets. Pent-up demand for textbooks and one-off government purchases helped lift underlying revenues by 22%, almost back to the pre-pandemic level.

Our school curriculum business benefitted from increased sales to governments, especially in Latin America, and Argentina in particular. Open market sales recovered well too, and we gained significant market share in Poland, which we intend building on. The English language teaching business recorded increased revenues across our territories, including the key market of Mexico.

We faced some headwinds, including the global paper shortage, which drove up prices, and higher logistics costs and inflation. These were partially offset by our cost-management measures.

Our employee engagement survey revealed very high levels of engagement. The past few years have been very tough, with schools closed across the globe. But it is clear our colleagues remain highly motivated and committed to contributing to their communities, through education.

In South Africa, we acquired a longstanding partner, Troupant Publishers, which specialises in vocational learning and teaching materials to prepare learners for the workplace or to help those in employment to progress. We will explore how to use the intellectual property in other markets.



Our acquisition of Troupant will enable us to expand our vocational learning business both in South Africa and in other markets.

PREGGY NAIDOO

MD, Macmillan South Africa

**150+ NEW
TEXTBOOK SERIES
PUBLISHED IN 2022**

Find out more about our *Advancing Futures* initiative
[IN THE SPOTLIGHT: ADVANCING FUTURES >](#)



IN THE SPOTLIGHT

ADVANCING FUTURES

Advancing Futures is an integral part of Macmillan Education's longstanding mission: to support teachers to inspire the next generation and to use the power of education to have a positive impact on society. The comprehensive programme is designed to introduce the topics of global citizenship, sustainability, and DEI into classrooms around the world.

It helps teachers share knowledge, develop skills and promote attitudes and actions to bring about positive and lasting change.



And it engages students with key elements of the SDGs and empowers them to work towards a fairer, more sustainable future.

Advancing Futures is built on four key pillars. Resources for teachers provides practical, ready-to-use resources, from lessons to videos and worksheets, to help teachers introduce and engage their students with the key SDG themes. Change Makers is a global collaborative initiative that invites students to create and share their ideas, dreams and actions for the world they want to live in. Our content uses measurable learning outcomes to equip students with the knowledge, skills and attitude they need to become active global citizens. Our commitment to advancing the SDGs, including SDG4, Quality education, is resolute, as we seek to help children thrive in today's interconnected world and drive positive change.



HEALTH IN 2022

We saw modest growth in the Health segment in 2022, with underlying revenue up by 0.3%.

The events business had a good year, with in-person gatherings once again possible, and subscriptions were up. Our portfolio in Austria performed well. ADIS, a leading global publisher of drug-focused content and solutions, also delivered strong results. Advertising revenues were stable.

Overall, however, the uncertain macroeconomic situation combined with the lingering effects of the pandemic resulted in cautious spending from our customers. Revenues from reprints, training and books were below our expectations.

We made two acquisitions in 2022 that will help drive growth in the coming years. Cureus is a peer-reviewed, OA medical journal (read more on [page 12](#)). Medbee is a mobile-first community platform for doctors in the fields of anaesthesia, internal medicine and general medicine. It started in Austria and is being rolled out in Germany.

The acquisitions of Cureus and Medbee will help drive future growth in our newly created Health segment.



PROFESSIONAL IN 2022



The Professional segment had a strong year across our main business areas. Underlying revenue grew by 4%, and is now back to pre-pandemic levels.

The transport and road safety education sector saw robust growth, driven by higher sales of driving simulators, particularly in France. Advertising revenues increased, while the business and engineering unit delivered higher subscription sales.

The events and congress business continues to recover, but was still affected by lingering COVID-19 restrictions and cautious spending in some industries. Higher paper prices and rising logistics and distribution expenses also increased costs. In 2022, we sold Rendement, a Dutch multimedia publishing company specialising in law for professionals in small and mid-size enterprises.

“

We had a successful 2022, with most of our business areas continuing their recoveries and contributing to our growth.

JOACHIM KRIEGER

Managing Director, Education, Health and Professional

PEOPLE

AROUND 9,500
EMPLOYEES IN
45 COUNTRIES

BE PART OF PROGRESS

At Springer Nature, our smart, curious people want to make a difference to their communities and the world. We provide a friendly, collaborative environment for them to do challenging and important work, and support them to achieve their full potential.

With around 9,500 employees in 45 countries, we're a truly global company, bound by an inspiring and inclusive culture.

We have four values that our people bring to life through our ways of working:



Partnership

Trust each other and engage to build strong relationships – inviting and respecting different perspectives, working well together and recognising the contributions of all.



Drive

Activate change and accelerate our potential. Be agile and adaptable, open to new ideas and embrace opportunities to develop and succeed.



Integrity

Deliver on our promises and priorities and inspire through our actions. Be a role model for others – fair, respectful and true to ourselves.



Responsibility

Do the right thing for all our communities and champion diversity, equity and inclusion. Play our part in ensuring we act as a responsible business, driving sustainable progress and acknowledging everyone's ideas and opinions.

EMPLOYEE ENGAGEMENT SURVEY HIGHLIGHTS

ENGAGEMENT SCORES ARE RISING AND ALIGNED WITH INDUSTRY BENCHMARKS
INCLUSION SCORES AT OR ABOVE BENCHMARK

73

our main employee
satisfaction score,
an increase of two
points since 2021

76%

of employees took part
in our employee
engagement survey

85

My manager demonstrates
inclusive behaviour
+1 since 2021



2,000 NEW COLLEAGUES JOINED SPRINGER NATURE IN 2022



STRETCHING HORIZONS

Our approach as an employer

As we continue to open up the worlds of science, research, education and health, we want more talented people to join us. In 2022, we developed a new employer proposition to articulate who we are and what we aspire to do.

Working with us means being part of progress, and making an impact on society. In return, we offer a place of work that enables colleagues to be curious, challenged and to develop, and which prioritises wellbeing, flexibility, opportunity and inclusion. To do that, we listen to our colleagues, collecting feedback from employee engagement surveys and employee forums. In 2022, 76% of employees participated in our annual employee engagement survey, up from 69% in 2021, providing 13,000 comments. The score for the main question, 'How happy are you working at Springer Nature?', increased by two points to 73, bringing us closer to the cross-industry benchmark score of 75.

We have embraced full hybrid working, with flexible working options. Our new 'workation' programme allows colleagues to work remotely from another location and combine it with a holiday or a visit to see family or friends.

In 2022, high inflation drove up the cost of living, affecting our colleagues across the world. To help, we made additional payments to employees with earnings below a certain threshold, in higher inflation countries.

Supporting wellbeing and development

We prioritise our colleagues' wellbeing, and strive to raise awareness about the benefits of good mental health. In 2022, we purchased 700 licences for the application Calm, and our colleagues completed nearly 2,000 hours of wellbeing-related training. Our 24/7 global employee assistance programme, open to all colleagues and their families, offers counselling, information and resources on emotional, financial, legal and work-life issues.

We want our colleagues to keep learning throughout their careers. All employees have a recommended five days a year for training and development, including online and in-person courses. We invested €4.7 million in education and training, with colleagues completing more than 60,000 hours of training.



BE YOURSELF

In pursuit of fairness and inclusivity

Promoting DEI in our organisation, communities and content is not just something we strongly believe in – it's our responsibility.

Our annual global inclusion and diversity survey informs our actions. It showed that while our inclusion scores are high and, as a whole, stayed stable or improved in 2022, we need to improve in some areas, including representation. This year, we set a new global representation goal for race and ethnicity in senior leadership roles. In our DEI mentoring programme, we targeted groups underrepresented in leadership positions or who experience lower levels of inclusion, according to the survey. The 70 mentees, who self-identified as people of colour, LGBTQ+, disabled or neurodivergent, worked with their mentors throughout the year, with a focus on professional development. We also launched new Group-wide training on inclusive behaviours.

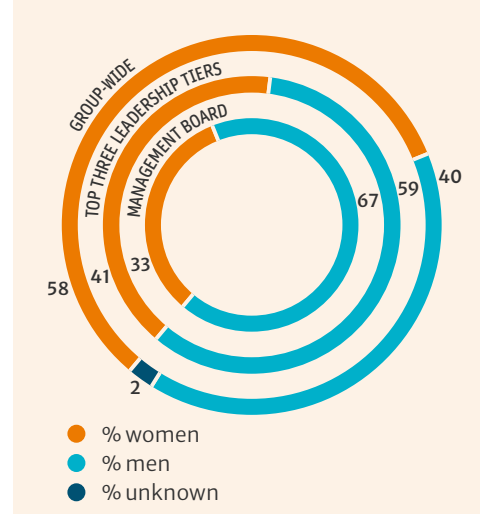
In 2018, we set a target of women filling 45% of posts in the top three leadership tiers by the end of 2023. At the end of 2022, the figure was 41% – the same figure reported in 2021.

Since 2019, quarterly tracking has shown that the gender split for the cohort of around 275 people has fluctuated between 40% and 45%. The figure is affected by people joining and leaving the company, as well as by reorganisations and changes in reporting lines. To help us improve our gender representation – and to meet our race and ethnicity goals – we've increased our focus on equitable recruiting, promotion and succession.

To serve our customers and communities in a fairer way, we introduced new frameworks to encourage editors and editorial boards to recruit more peer reviewers and editorial board members that are representative of the broader research communities they work with. Our books publishing divisions performed an audit of who, what and how they publish, and created training resources for authors and editors, including implicit bias training.

Our employee networks have more than 1,400 members and unite colleagues who share an identity or, like our Green Office Network, are working towards the same goal. This year we added our eighth network, a Jewish Employees Network.

GENDER SPLIT



“

It's very clear to us that we can create better science if we better represent the communities that we serve.

JESSICA GEDAMU

VP Global Diversity, Equity and Inclusion



SUSTAINABILITY



Through our work, we strive to enable the solutions that can make the world a better place. Publishing trusted research and analysis increases the understanding of the most urgent societal challenges.

We also strongly believe in doing things the right way – it's why responsibility is one of our core values, and permeates everything we do. As a sustainable business, we're committed to minimising our environmental impact. As an ethical one, we're determined to uphold the highest standards of governance, including assuring human rights in our supply chain. And we take action to inspire positive change, to help make sure we serve our communities and customers fairly.

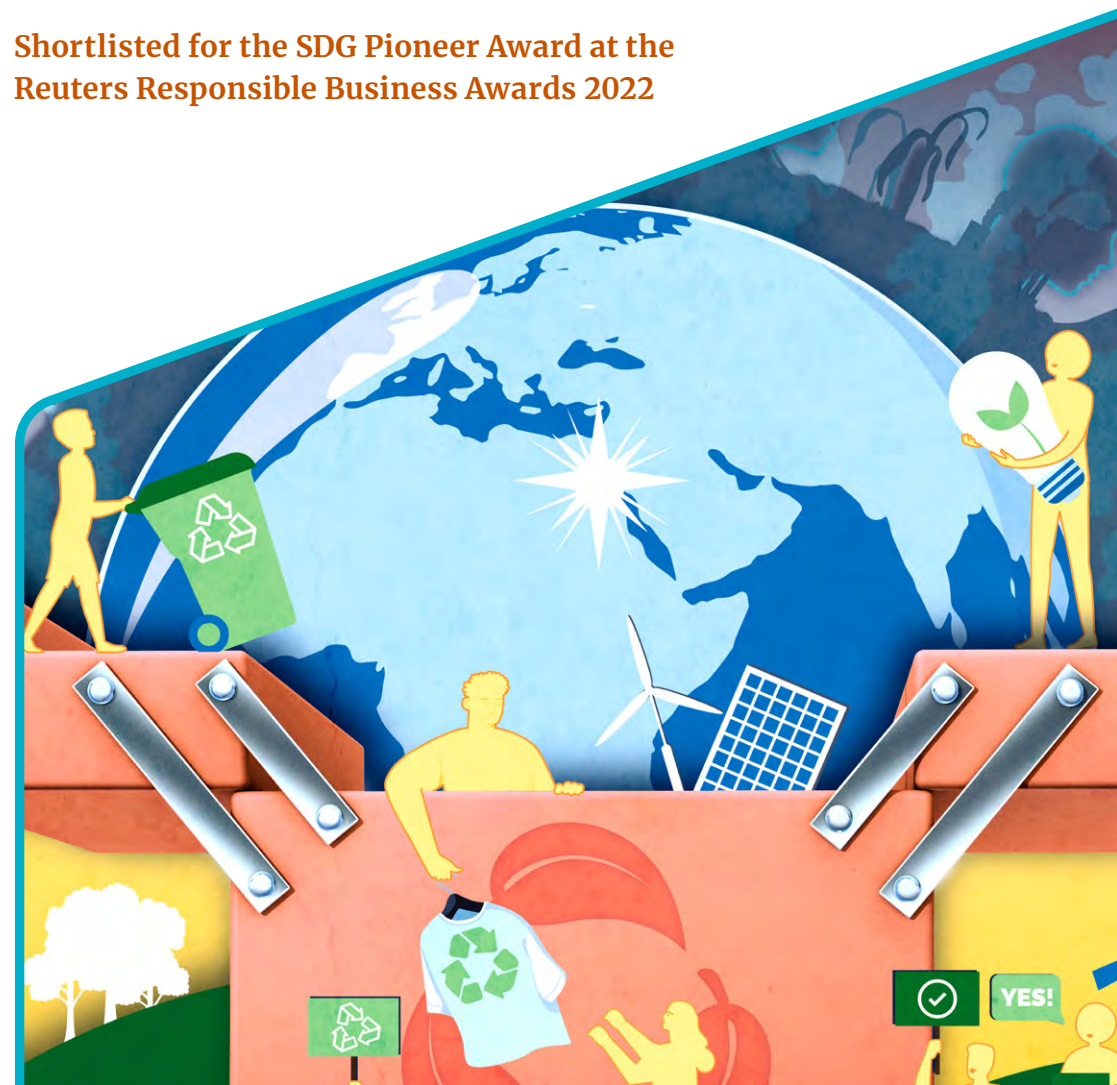
**93K SDG ARTICLES
OR BOOKS PUBLISHED
IN 2022**

THE SDG PUBLISHER OF CHOICE

The 17 SDGs are a call to action to help solve some of the world's most pressing problems, from poverty to climate change and inequality. The greatest contribution we make towards achieving the SDGs is through our published content. Our goal is to be the publisher of choice for researchers whose work tackles global challenges, and we're investing in our publications, people and technology to make that happen. Since 2015, we've published more than 800,000 pieces of SDG-related research (roughly one in five of all our published articles in that period), which were collectively cited more than 9.5 million times. In our annual survey on how our communities perceive us, half of all respondents agreed we are advancing the SDGs, up from 35% in 2021.

Credit: elenabs/iStock/Getty Images Plus/Getty; Irina_Strelnikova/iStock/Getty Images Plus/Getty; Mykyta Dolmatov/iStock/Getty Images Plus/Getty; Rudzhan Nagiev/iStock/Getty Images Plus/Getty; artpartner-images/The Image Bank/Getty. Banner design: Valentina Monaco and Bethany Vukomanovic.

Shortlisted for the SDG Pioneer Award at the Reuters Responsible Business Awards 2022



Read more in our 48-page
SUSTAINABLE BUSINESS REPORT >

WE AIM TO BE NET ZERO CARBON BY 2040

TOWARDS A NET ZERO FUTURE

As a leading publisher of climate research, we follow the science. We've been carbon neutral since 2020, and are now setting science-based targets to be net zero carbon through the value chain by 2040. For the next decade we will focus on emissions reductions.

At the end of 2022, our direct emissions were down 56% compared to 2019 levels, mainly due to reduced business flights, but also sustained reductions in office emissions. We expect business travel to rise in 2023 and are taking steps to monitor and limit the increase. To reflect our hybrid working practices, we offset home working and commuting for the first time this year. All carbon offsets are made through carefully selected Plan Vivo-certified forestry projects. We are a long-time partner of CommuniTree, the largest reforestation initiative in Nicaragua, which works with smallholder farmers to create sustainable income opportunities from growing trees on underused parts of their land.

€1.35M IN DONATIONS TO GOOD CAUSES

Credit: CommuniTree, C Level



WORKING ETHICALLY

As part of our commitment to integrity and human rights, we:

- operate a zero-tolerance policy for corruption involving our employees or supply chain
- encourage our people and business partners to use our whistleblowing system
- expect our business partners to align with the same standards we set for ourselves, including fair pay and working conditions
- focus strongly on digital security and data protection to protect our customers, employees and our reputation
- pay our fair share of tax, with an average tax rate at Springer Nature Group of around 30%.

GOVERNANCE

MANAGING OUR BUSINESS RESPONSIBLY

Through our Code of Conduct and other internal policies and guidance, the principles of responsible governance, compliance with laws and ethical business conduct are embedded throughout our organisation.

We are committed to:

- operating ethically and responsibly, demonstrating transparent and effective corporate governance
- sound operational and financial management to promote the long-term interest of our company and stakeholders
- compliance with legal and regulatory requirements.

GOVERNANCE STRUCTURE

Our General Counsel oversees our governance processes.

Springer Nature is organised as a German partnership limited by shares, a hybrid form of German stock corporation.

Corporate governance follows the principle of co-control exercised by the shareholders:

- Holtzbrinck Publishing Group, a family-owned company based in Stuttgart (53%)
- BC Partners, a British investment company (47%).

We have a dual-board structure, with members who are ideally placed to promote the long-term success of the company:

- The **Management Board** manages Springer Nature. It has six members, all highly experienced and with a proven track record of leading innovation, scaling businesses, expanding distribution and managing global operations. The Management Board is led by Frank Vrancken Peeters, Chief Executive Officer.
- The **Supervisory Board** oversees the management of Springer Nature. It has eight members, including three independent members, with a wide range of skills and experience. The Supervisory Board is elected by the general meeting for a term of four years, and is led by our Chair, Stefan von Holtzbrinck. For more information, see springernature.com/supervisoryboard

COMMITTEES

The Supervisory Board has two committees:

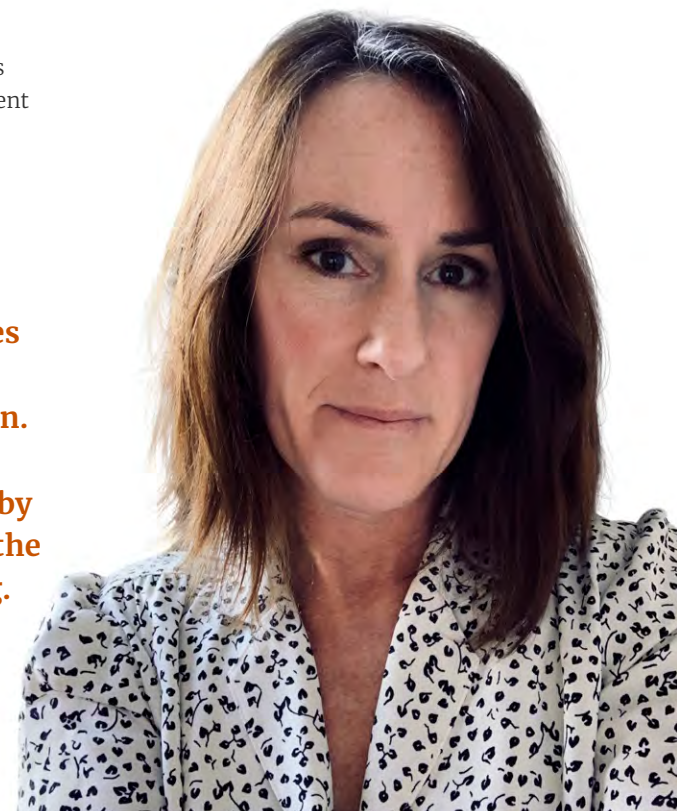
- The Remuneration Committee debates the service agreements of the Management Board members, remuneration and employment matters.
- The Audit Committee monitors the accounting process, the effectiveness of the internal control, risk management and internal audit systems, the audit of the annual financial statements and other services, and compliance.



Governance lives and breathes throughout Springer Nature because we are purpose driven. We take our responsibilities very seriously – for example by ensuring that integrity is at the heart of research publishing.

RACHEL JACOBS

Group General Counsel



COMPLIANCE, RISK AND INTERNAL AUDIT

Our Group-wide compliance system is designed to identify and proactively address the relevant legal and regulatory risks. It covers seven core areas:

- corporate culture
- risk assessment
- policies and procedures
- training and communication
- a route for enquiries and issues
- due diligence
- monitoring and investigation.

The Chief Risk and Compliance Officer is responsible for internal governance, the risk assessment and management system, and design of the compliance system. She is supported by four full-time employees and a network of senior managers responsible for implementing our risk management and compliance processes.

The governance, risk and compliance (GRC) function works closely with the internal

audit team, which acts as an independent and objective assurance and consulting entity within the Group. The internal audit team supports the organisation through a structured process to evaluate the effectiveness of governance, risk management and control processes.

To ensure independence, the internal audit team reports to the Audit Committee with a functional reporting line to the Chief Financial Officer. The GRC function reports in the same way, with a functional reporting line to the General Counsel. The Chief Financial Officer and General Counsel sit on the Management Board.



We are dedicated to the ethics of new technologies, including AI, and the use of generative AI for text and images in scientific content.

DINAH SPENCE

Chief Risk and Compliance Officer

GOVERNANCE IN ACTION

Springer Nature's Management Board establishes the rules for ethical decision making in our business units. Our Group policies are supplemented by management guidance documents. We also issue policies and guidance to third parties based on guidelines and best practice recommendations such as the Committee on Publication Ethics (COPE), UN Global Compact and the OECD Guidelines for Multinational Enterprises.

Our Editors' Information Guide and Journal Editors' Code of Conduct guide the actions of our external academic editors who evaluate content published in our journals. Our publishing and editorial policies were developed in consultation with the research communities that we serve, including authors and librarians, and are rooted in our belief that scholarly communication is aided by greater transparency of our operating processes.

Our research integrity group advises our editors, reviewers and authors on best practice and ethical conduct in research. We provide training for internal editors and resources for external editors on the fundamentals of publication best practice, and on how to resolve research integrity problems when they arise.

Our [Business Partner Code of Conduct](#) helps our business partners understand what we expect of them. Compliance with the Code is included in their contractual obligations.

We are dedicated to the ethics of new technologies, including AI, and the use of generative AI for text and images in scientific content. At every stage of developing and implementing our AI solutions, we work to prevent the potential for discrimination and harm. We also align how we use AI with Springer Nature's approach to DEI: recognising and challenging structural inequities and mitigating their effects. We have established an internal AI ethics and safety committee, and have defined standards and AI principles to govern the responsible and sustainable use of AI in scientific publishing.

GROUP OUTLOOK

We started 2023 positively and in line with our expectations of another year of underlying growth, even as the post-pandemic rebound effects on our education and professional businesses fade.

As we've done consistently in recent years, we aim to increase the number of journal articles and books that we publish, and to expand our range of services to the research community, as well as the education, professional and health sectors.

This will enable us to grow our revenues, while increasing our investments in technology and people. We aim to achieve this by:

- Maintaining and growing our strong focus on open access publishing for the benefits it provides to our authors and wider society.
- Exploring opportunities afforded by emerging technology to increase the range of solutions we can offer our authors and customers and support the advancement of open science.
- Continuing to digitise our product portfolio, to increase features and value for customers, lessen reliance on printed products, and in turn support our ambitions to lower the carbon footprint of our operations.
- Ensuring that Springer Nature is a great place to work and thrive.



To learn more about the
Springer Nature Group,
please refer to our websites:

Research

Springer Nature [springernature.com](https://www.springernature.com)

Springer [springer.com](https://www.springer.com)

Palgrave Macmillan [palgrave.com](https://www.palgrave.com)

Nature [nature.com](https://www.nature.com)

BMC [biomedcentral.com](https://www.biomedcentral.com)

Education

Macmillan Education [macmillaneducation.com](https://www.macmillaneducation.com)

Health

Springer Medizin [springermedizin.de](https://www.springermedizin.de)

BSL [bsl.nl](https://www.bsl.nl)

Professional

Vogel [heinrich-vogel-shop.de](https://www.heinrich-vogel-shop.de)

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