

SPRINGER NATURE GROUP

Annual progress report 2021

TRUST
IS OUR BOND

The glue that binds us together
in a unique and different way

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WHAT BINDS US TOGETHER



TRUST MATTERS
KNOWLEDGE WITHOUT BOUNDARIES
CURIOSITY DRIVES PROGRESS

In nature, chemical bonds create the connections that are essential to life. In scientific discovery, a similar bond draws researchers, editors, peer reviewers, policymakers and practitioners together to advance the latest trusted knowledge.

At Springer Nature we're at the heart of that bond. With 180 years of heritage, and an unmatched reputation as custodians of the quality and integrity of research, we publish some of the world's most influential journals. We're the largest academic book publisher. We also inspire learning in school classrooms, and bring insights into workplaces, including hospitals and doctors' surgeries. Our purpose – opening doors to discovery – guides us, and using technology and innovation we are helping to connect the world.

Three key principles shape everything that we do:

- Trust matters
- Knowledge without boundaries
- Curiosity drives progress

TRUST MATTERS

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

That's why we're committed to providing dependable and authoritative content that is transparent and unquestionably accurate. By upholding these values and targeting our investments in this area, we will continue to earn the trust of the communities we serve.



94% of our customers agree that we publish 'rigorous research that can be trusted'



Most of our in-house editorial staff have previously worked in research



Provides comprehensive insights to enable data-driven research strategies and measurement of performance

KNOWLEDGE WITHOUT BOUNDARIES

Finding solutions requires teamwork, cross-disciplinary working and an openness to views that challenge us.

Partnership, collaboration and diversity are central to our publishing endeavours and, we believe, key to unlocking the mysteries of our universe.



We've published more than 390,000 articles or book chapters relevant to the sustainable development goals since 2015



Our Black employee network created a speaker series that highlights the contributions of Black scientists and innovators



pieces of research on COVID-19 published



We were the first publisher to offer open access options on subscription journals



We've published more than one million open access articles to date



Our goal is for half the primary research articles we publish to be open access by 2024

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. That's why we are in the driving seat of open science, finding new ways to unlock its potential, and take us faster and deeper into the future.

CHAIR'S INTRODUCTION — WORKING TOGETHER FOR A BETTER WORLD



STEFAN VON HOLTZBRINCK
Chair

“
By reaching out to as many people as possible, and incorporating diverse thinking and voices, we help foster deeper understanding and faster solutions to global problems.

Scientific discovery has driven extraordinary progress over the past two centuries. Yet there are still urgent challenges. Some are as old as humanity, like ensuring the supply of food and energy; others are newer, like climate change and living well as we live longer. The good news is that humankind has the tools to tackle them all – our ingenuity, rapidly advancing technology and, most importantly, international collaboration – with scientists sharing trusted know-how for the benefit of all, rather than the few.

That's where research publishers have such a big role to play. Science works best when it is a truly global endeavour and, throughout Springer Nature's history, we've sought to promote knowledge without boundaries. We bring people together across continents, in school classrooms, through the research cycle, and in healthcare facilities and other professional workplaces, where lifelong learning continues. We ensure the latest insights and data can be shared and built upon, openly and transparently. By reaching out to as many people as possible, and incorporating diverse thinking and voices, we help foster deeper understanding and faster solutions to global problems. Our Sustainable Development Goal publishing programme is just one example of global collaboration helping solve common goals for all.

The need for solidarity in the scientific community goes further. With increasing divisions, geopolitical shifts and polarisation in the world, misinformation is a growing problem, and a barrier to informed decision-making and progress. The entire research network, including academics, scientists, funders, governments and publishers, needs to work together to defend scientific truth, and to direct policymakers to the best sources. We're investing heavily in technology to distinguish fake news from facts, and to make the research journey smoother. Human curation will continue to be an integral part of science communication, helping current and future generations safely navigate the flood of information.

By avoiding self-interest, working together and standing up for what's right, we can all look forward to the opportunities that lie ahead of us in science in the age of artificial intelligence.

STEFAN VON HOLTZBRINCK
Chair
Springer Nature Group

CEO'S INTRODUCTION — ADVANCING SCIENCE THROUGH TRUTH



FRANK VRANCKEN PEETERS
Chief Executive Officer

“
We give our people the freedom and tools to be bold and to innovate.

In today's digital world, more people than ever have access to information – and misinformation. Telling one from the other can be hard. But it is crucial. Because only with verified, evidence-based knowledge can we make the decisions that will help solve the planet's most urgent challenges. That gets right to the heart of our mission at Springer Nature. We connect the global network of researchers, authors, editors, funders and policymakers to share the latest discoveries. Trust is our bond.

When people deny the science, whether on the climate emergency or the pandemic, it is our responsibility to share the facts as widely as possible through our scientific journals and books. Trusted knowledge guides the rest of our business too, whether it's in classrooms with our learning materials, or the workplace, where clinicians and other professionals act on the latest insights. By doing all this in an equitable and diverse way, we can have a positive impact on society – that's the first thing I tell anyone who wants to work for or with us.

A PEOPLE BUSINESS

Our sense of purpose, which we call opening doors to discovery, is something you can feel when working in any of our offices, anywhere in the world, because it

is driven by our colleagues. We've been a people business since we started as two tiny publishing houses in Germany and the UK 180 years ago. Even today, when we talk about investment, it starts with our people.

We're large enough to work on major industry-changing initiatives, but not so large as to become bureaucratic, so we give our people the freedom and tools to be bold and to innovate. We don't always succeed at first, but when we believe in something, we persevere and lead the way. Open science is one example. The idea was promoted by funders of research, who did not want barriers in the way of findings that could help tackle society's problems. Though that challenged the traditional subscription business model for research publishers, we knew that it was the right thing to do.

So, for more than 20 years now, we've pioneered open access publishing, making ever more of our journals and books free to read online. In 2021, we published our one millionth open access article, an industry first. We're proud of this milestone and grateful to all our colleagues who helped make it a reality. But of course this is just the first stepping stone towards being truly open, so we can best accelerate discovery and solutions to the world's biggest challenges.

CEO'S INTRODUCTION CONTINUED

DRIVING OPEN RESEARCH THROUGH TECHNOLOGY

We aim to build on this progress by accelerating the move towards an open science future where all outputs of research – not just the published article of record but also the code, data, protocols and preprints – will be open to everyone. Technology is the key. We're partnering with software companies and other experts to help our customers get the most out of our products, platforms and services. Artificial intelligence is enabling us to detect plagiarism, and to find the right peer reviewers to best assess research. We're also using technology to make the publication process more transparent and faster, and to increase the discoverability of the many millions of articles we have published from the early 19th century to the present day.



A SUSTAINABLE FUTURE

Turning the focus to the way we operate internally, sustainability, and all that it encompasses, is crucial. We've made progress in many areas, like becoming carbon neutral for our direct operations, and working to build an open culture that champions diversity, equity and inclusion. Sustainability also, of course, means being financially secure, and in 2021 we again demonstrated our resilience, even as the pandemic endured. This was especially impressive given that we were operating in a tight recruitment market and most of our colleagues continued to work from home for much of the year.

TAKING A STAND

Looking ahead, 2022 was supposed to be the year when things returned to normal. But Russia's invasion of Ukraine changed all that. We condemn the war, with its senseless loss of life, and call for an end to hostilities. Along with other academic publishers, we stopped all new sales and marketing to research institutions in Russia and Belarus. The war has caused commodity prices and inflation to increase, creating further hardship around the world.

The wider geopolitical fallout also raises concerns around the future of research. For decades there's been a strong conviction within the research community that there should be no restrictions to collaboration, irrespective of gender, religion, race or political regime. Because the more minds you bring together, the better solutions you will have to the problems that we face as a planet. That's why, like other publishers, we continue to publish and distribute manuscripts from Russian authors in an independent way.

GROWING OUR BUSINESS

For us, the main priorities now include making sure that our people remain happy, motivated and with great opportunities for learning and development. We are also hiring new talent where we have gaps, to help us further open up research. By 2024, we want half of all our research content to be open access, which will require a major effort. Our education and professional segments are showing further signs of rebounding, and we're looking to grow in new markets. We're also focused on expanding our health segment, which we will report on separately in 2022, for the first time.

Given the state of the world, I know that the next few years will be challenging, but also exciting for Springer Nature. With our focus on truth, we'll be at the centre of fighting back against falsehoods, helping people make informed decisions about the future of humanity.



When people deny the science, whether on the climate emergency or the pandemic, it is our responsibility to always push the facts.

FRANK VRANCKEN PEETERS

Chief Executive Officer
Springer Nature Group

ONLY WITH VERIFIED, EVIDENCE-BASED KNOWLEDGE CAN WE MAKE THE DECISIONS THAT WILL HELP SOLVE THE PLANET'S MOST URGENT CHALLENGES

**WHATEVER HAPPENS, WE ARE THERE
ALONGSIDE OUR COMMUNITIES
HELPING THEM TO PUBLISH, ACCESS,
USE, TRUST AND FOLLOW THE SCIENCE**

MAKING CONNECTIONS

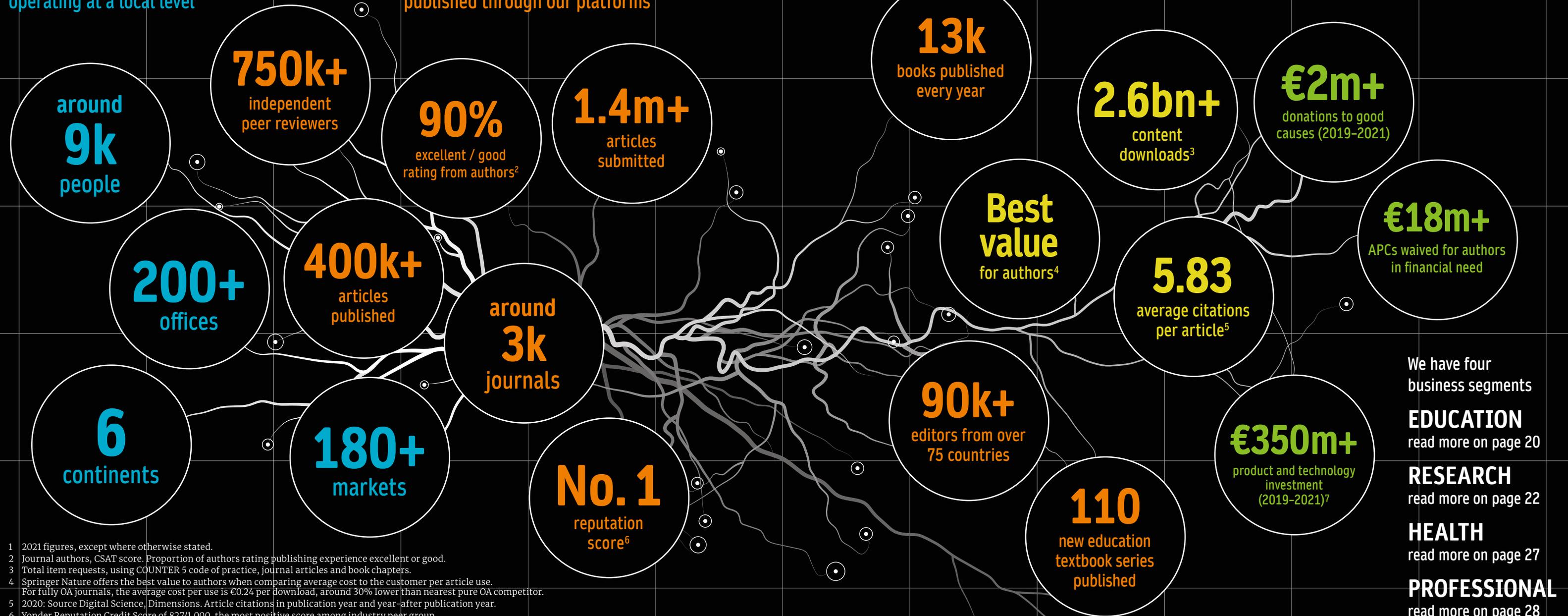
OUR NETWORK IN NUMBERS¹

We're a global business operating at a local level

We're a source of trusted information published through our platforms

Our content has extensive reach

We invest for our communities



We have four business segments

EDUCATION
read more on page 20

RESEARCH
read more on page 22

HEALTH
read more on page 27

PROFESSIONAL
read more on page 28

¹ 2021 figures, except where otherwise stated.

² Journal authors, CSAT score. Proportion of authors rating publishing experience excellent or good.

³ Total item requests, using COUNTER 5 code of practice, journal articles and book chapters.

⁴ Springer Nature offers the best value to authors when comparing average cost to the customer per article use. For fully OA journals, the average cost per use is €0.24 per download, around 30% lower than nearest pure OA competitor.

⁵ 2020: Source Digital Science, Dimensions. Article citations in publication year and year-after publication year.

⁶ Yonder Reputation Credit Score of 827/1,000, the most positive score among industry peer group.

⁷ Includes IT-related operational spend.

DISCOVERY FOR LIFE

The lifelong journey of discovery – learning, being inspired, using knowledge to solve problems and leave the world in a better state – is part of what makes us human. But it depends on one key thing: facts.

In today's world, with fact and fiction colliding, facts are not always easy to find. That's why people come to Springer Nature, where truth matters, and trust is our bond.

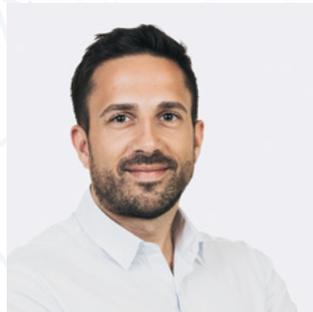
Our work begins where discovery begins – in schools, where children use our textbooks and online learning materials. We also provide educators with tools to break down barriers, by teaching students some of the world's most commonly spoken languages before they start higher education.

And this is where we make our biggest contribution to advancing discovery, by building connections with researchers and authors at universities across the world, and then sharing these validated insights. Through our vast networks of editors, peer reviewers and experts, and using the latest technology, we evaluate, quality-assure, improve, and publish the

latest high-quality research, much of which is free to read, as we move towards an open science future. Those insights act as a springboard for new discoveries, keeping science moving.

Of course, discoveries are not made only to enhance knowledge, but to be applied. We help make that happen too, through our publications and services that make the latest ideas and findings accessible and understandable to clinicians, pharmacists, engineers and other professionals, for the benefit of their patients and customers. And our magazines feed curious minds, young and old.

We do all this through four complementary business segments: education, research, health and professional.



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We're more than a publisher – we manage, connect, support and enable a vast network of people involved in research and learning to advance discovery.

DANIEL KORANY
VP CORPORATE STRATEGY

Our work begins where discovery begins – in schools, where children use our textbooks and online learning materials.

120+ COUNTRIES
IN WHICH WE
HAVE A LOCAL
PRESENCE



OUR EDUCATION TEXTBOOKS ARE USED BY
30 MILLION+ STUDENTS AROUND THE WORLD



MEXICO, INDIA AND SOUTH AFRICA
— KEY MARKETS FOR CURRICULUM MATERIALS



EDUCATION

At Macmillan Education, we've been advancing learning for nearly 180 years.

Our reputation has enabled us to build lasting relationships with educators and governments. Our teams travel the world, visiting schools to learn more about teachers' and students' needs, and are constantly introducing new methodologies and teaching resources to keep up with technology.

Our curriculum unit creates print and digital content, using world-leading methodologies and pedagogies, to fit the educational needs of a country across all age groups, subjects and in local languages. In pre-primary and primary schools, our English literacy and comprehension materials help children learn English through play and to develop a love of reading. Through our many local maths books and eBooks, students learn to think mathematically, rather than by rote, while series such as Max Science introduce children to the key concepts of biology, chemistry and physics at a young age. All are designed to support the learner in developing critical skills on their learning journey. We provide assessment and teachers' guides, in both English and Spanish, and guidance and support for parents to help their children at home. Teachers also benefit from our professional development and training programmes.

Our English language teaching unit has helped millions of students of all ages improve their language skills to help them succeed in education, in the workplace, and throughout their lives. *Gateway to the World* is a truly global course that prepares young adults for university entrance exams. The third edition, which was recently launched, combines new content and digital tools with a methodology already widely used around the world, so that teachers and students can move simply between online and face-to-face classes.

RESEARCH

We use our close relationships in the scientific community to connect authors with all those who will be interested in and potentially use their research to advance their own discoveries, through a variety of established and innovative digital channels.

We publish academic journals and books that cover advances in science, technology, medicine, the humanities and social sciences. We also offer advice and solutions to authors to help them prepare their research for submission.

Our **journals** business unit includes some of the most prestigious brands in scholarly publishing, like our flagship *Nature* journal, leading BMC open access journal *Molecular Cancer* and our SpringerLink platform. Most researchers and authors choose to publish in titles that bring the most visibility to their work and in that sense, our wide range of journals and extensive reach put us in a strong position. We also work closely with scientists and policymakers to help tackle the world's most pressing challenges, from climate change to COVID-19. We publish journals and reference works in support of the United Nations Sustainable Development Goals (SDGs), which are 'at the core of a plan for peace and prosperity for people and the planet'.



 Springer nature portfolio

Our **books** business unit provides in-depth reference material in print and eBook formats, across all academic disciplines. Our portfolio includes monographs, textbooks and major reference works published through our imprints, including Palgrave Macmillan and Springer. We publish more academic books than anyone else.

The **platform and solutions** business unit puts 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. Our platforms for open research, including SpringerLink and nature.com, supported 2.6 billion engagements in 2021 and over 2.5 million visits per day. In research solutions we support researchers through author solutions such as artificial intelligence (AI) digital editing and translation, preprints and training to support 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 and solve their critical problems. 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 assists organisations to attract talent, promote their brand and build their reputation.

Our **consumer media** business unit communicates research to the general public through regionally focused magazines like *Scientific American*, *Spektrum der Wissenschaft* and *Investigación y Ciencia*.

 BMC

 SCIENTIFIC AMERICAN

 palgrave macmillan

400K+ ARTICLES
PUBLISHED
IN 2021

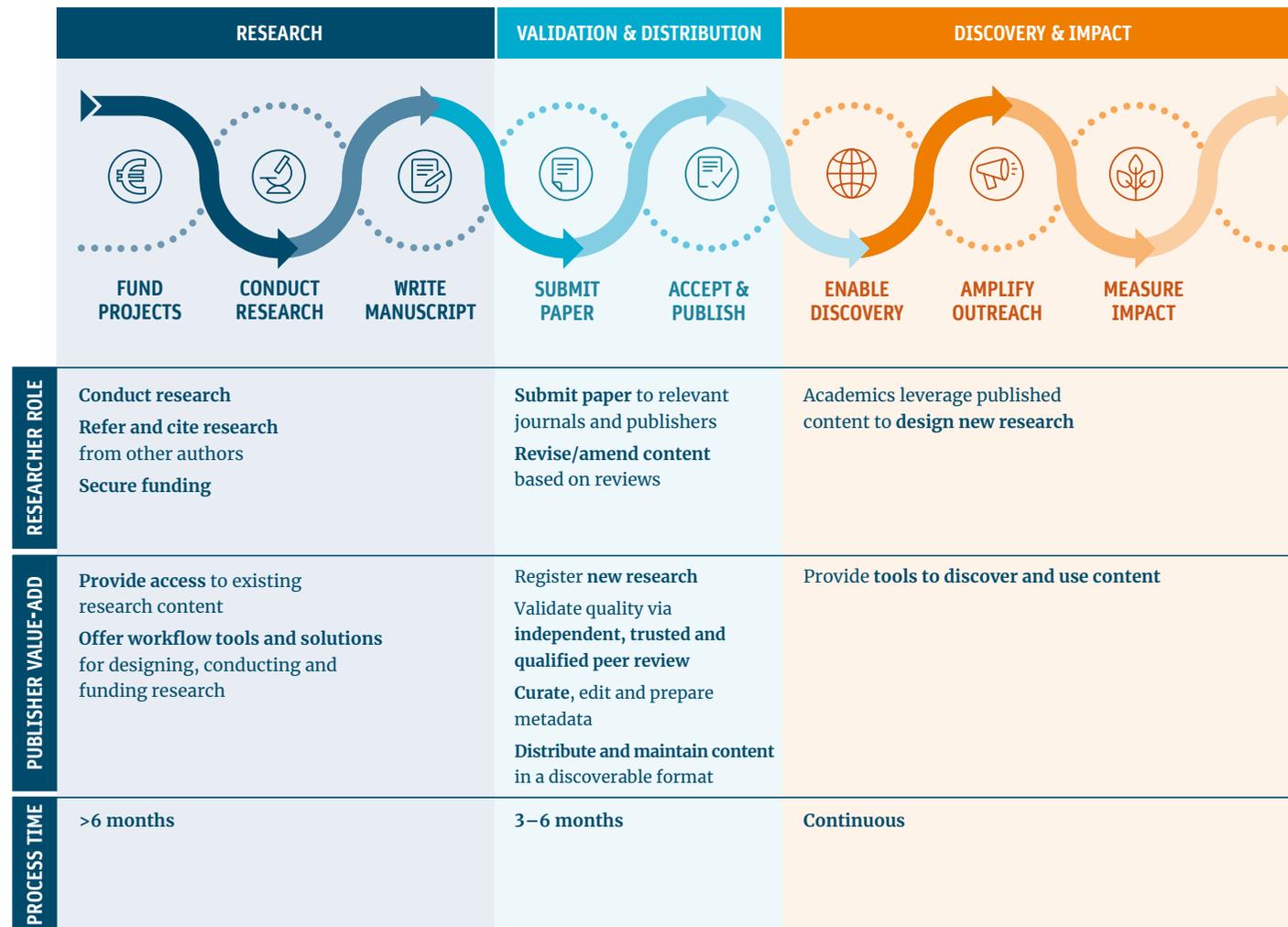
THE MARKET

While there are more than 2,000 academic publishers, we are one of a few globally leading 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 open access models, research funding bodies including charitable foundations.

RESEARCH — OUR NETWORK IN ACTION

Far more than just a publisher or a pipeline, we're an integral part of the scientific community – the essential link in the research process. Using our extensive network of experts, our knowledge, relationships and our technology, we work across the entire value chain.



Ensuring quality, integrity and discoverability

To fulfil our role as the leading custodian of quality, trust and integrity in research, we call on 750,000 independent peer reviewers and 90,000 editors. Their standards are high and demands stringent. Of the manuscripts that are submitted, only four in ten are accepted for publication by our journals. At our Nature-branded titles, which publish research on the basis of originality, importance and interdisciplinary interest, the rate is around one in ten.

Even when a manuscript is rejected, our work is often not over. Our transfers network 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 2021, around 35,000 articles were published in this way.

Though we still print books and journals, most of our output has for some time now been digital. All published research is uploaded to our platforms, like SpringerLink, nature.com and biomedcentral.com, and tagged with data that makes discovery and sharing easy. Increasingly, this content is published open access, meaning that it is 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.

Using technology to drive progress

Technology is helping us advance science faster, for more people, at a lower cost and with a smaller impact on our planet. We already use it in numerous ways, like automatically matching submissions with peer reviewers and identifying inaccurate or fake research. AI and machine learning (ML) enable us to provide bespoke

summaries of research for individual readers. But we still have a long way to go. Researchers expect, and deserve, the same level of user experience as that provided by the best technology companies. We – and the rest of the publishing industry – are not there yet. The most successful research publishers over the next decade 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 quickly to market. One example of this is our partnership with Slimmer AI to develop PySciDetect, an open source integrity software to identify fake research.

SNAPP: A SMOOTHER, FASTER PUBLISHING PROCESS

For researchers, the publication process can be complex and time-consuming. So we are developing Snapp (the Springer Nature Article Processing Platform), a new platform that enables a more efficient and effective publishing process. Designed by our technology experts, with input from the research community, Snapp includes single-click transfers so that authors can more quickly find the right journal for their research, the integration of systems for rights, waivers, payments and funding options, and tools for finding reviewers. It also adopts AI and ML models to streamline and improve the entire submission-to-publishing experience.

FOR OUR SPOTLIGHT ON OPEN ACCESS FEATURE SECTION, SEE PAGE 30



HEALTH

For nearly a century, we've been providing doctors, dentists and pharmacists with trusted insights, advancing medical knowledge for the benefit of patients.

Through its three business units and with strong brands, our Health segment provides healthcare professionals with trusted insights, advancing medical knowledge for the benefit of better diagnostics, treatment and care of patients.

We lead the market in Germany and the Netherlands through more than 120 journals/periodicals and a wide portfolio of books. We provide additional services for healthcare professionals, including trusted and highly relevant expert medical information, cooperating with more than 200 societies and medical associations. This includes the latest scientific research, continuing medical education, industry news, healthcare policy and practice management.

We 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 Health business has been newly set up as a reporting segment and so will appear in financial reporting from 2022 onwards.

Reaching in excess of 240,000 registered healthcare professionals worldwide, our main brands include:

 Springer Medizin

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

 Springer Healthcare

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

 bohn stafleu van loghum

Bohn Stafleu van Loghum (www.bsl.nl)
A leading Dutch brand for publications, learning solutions and services for healthcare professionals and students.



PROFESSIONAL

Our businesses and brands equip professionals with the knowledge and support they need to achieve their potential.

We provide tailored information and services for several markets in Europe, including road safety education, engineering, business, management and law.

We are market leading in Europe with our road safety business, which provides teaching and learning solutions for driving schools, through brands like Vogel, Codes Rousseau and Etrasa. The Vogel driving simulator offers new drivers and their instructors a faster, more efficient and cost-effective complement to in-car training. The device simulates assigned driving tasks, providing instructors with a clear picture of students' strengths and weaknesses – before they have their first practical lesson.

Our brands and products also include Springer Vieweg and Springer Gabler which focus on applied natural sciences, technology and management through their magazines, events and as part of the Springer Professional platform.



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The simulator takes away the fear, gives security and the first hours of driving are then far more stress-free for both the learner driver and the driving instructor.

UDO WAGNER

FAHRSCHULE FOLLOW ME, UNTERHACHING, GERMANY

OPEN ACCESS

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

In this feature:

Our journey so far

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The benefits of OA

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OA in numbers

Page 33

Research – a business model in transition

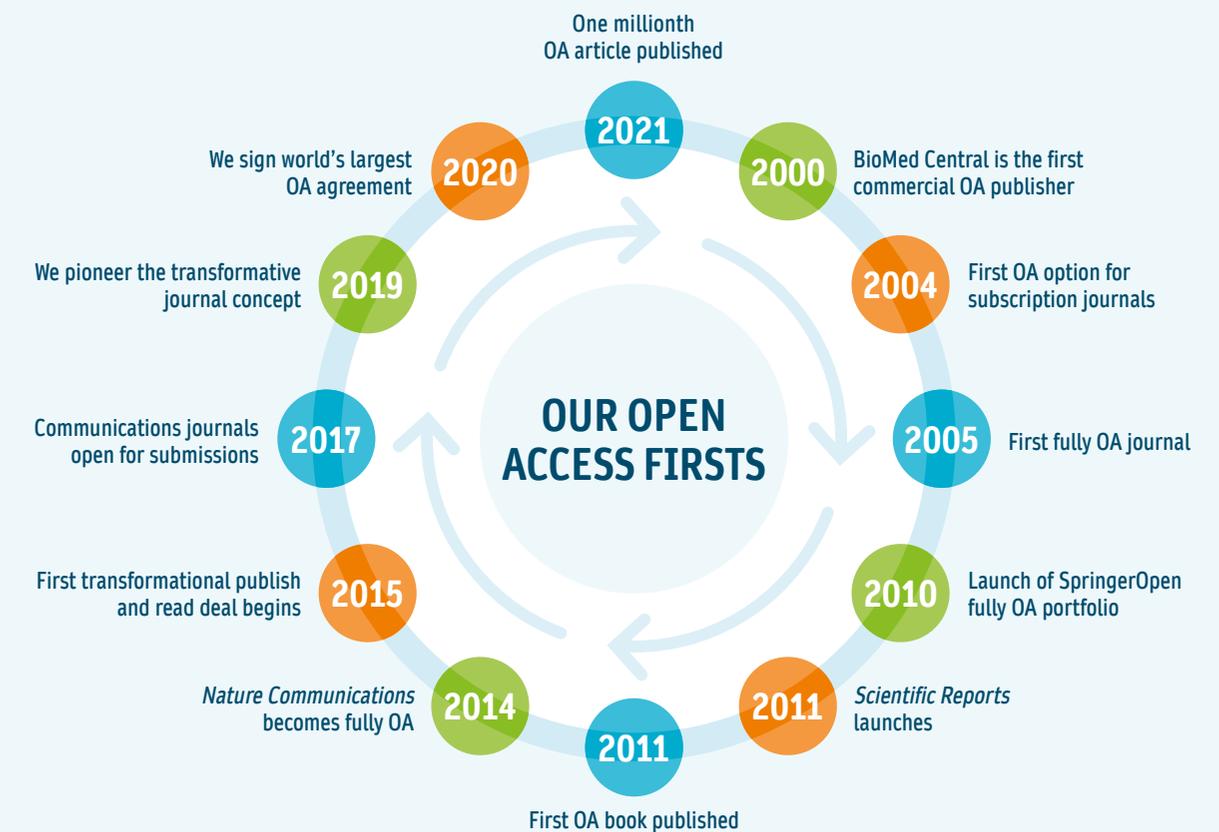
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Solutions to open up science

Page 36

OUR JOURNEY SO FAR

At Springer Nature we've been a pioneer and leader in OA publishing for more than 20 years, committed to making peer-reviewed research immediately available for all to read, share and use online – for free. In 2021, we published our one millionth OA article, an industry first. By 2024, we aim to have at least half of all our primary research published OA. And we won't stop there. Because only by fully opening up research, from the underlying methodologies and data to the published article, can we realise the benefits of open science and accelerate solutions to the greatest challenges we face today, from pandemics to ending poverty.



THE BENEFITS OF OA

GREATER INFLUENCE, THE SAME INTEGRITY AND QUALITY

For researchers and authors, there are several advantages to publishing OA. Books published OA are downloaded (read and used) ten times more, and cited (built upon by others) 2.4 times more, than non-OA books.

They have greater international reach – to 61% more countries.

Journal articles published OA are downloaded six times more than those behind paywalls, and attract 1.6 times as many citations, with many more mentions in news reports. There is also the satisfaction in knowing that everyone can benefit from the research, now and forever, not just the subscribers to a journal.

OA BOOKS ARE USED TEN TIMES MORE THAN NON-OA BOOKS

But what about the quality? The transition towards OA has changed the research publishing business model (see pages 34–35). Rather than the reader paying, via (mainly institutional) subscriptions, the researcher, usually through their academic institution or funding body, now pays for publishing. Some question whether this leads to a conflict of interest, because it could encourage publishers to accept more papers for publication simply to increase revenues. The processes we have in place, along with the strong independence of our editorial systems, are effective safeguards against this – the result being that acceptance rates are the same for our OA and non-OA journals. Decisions about quality remain in the hands of our expert editors, both in-house and those 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 transformative or hybrid journals, which are committed to going fully OA, authors have the option to publish either OA or through the subscription model.

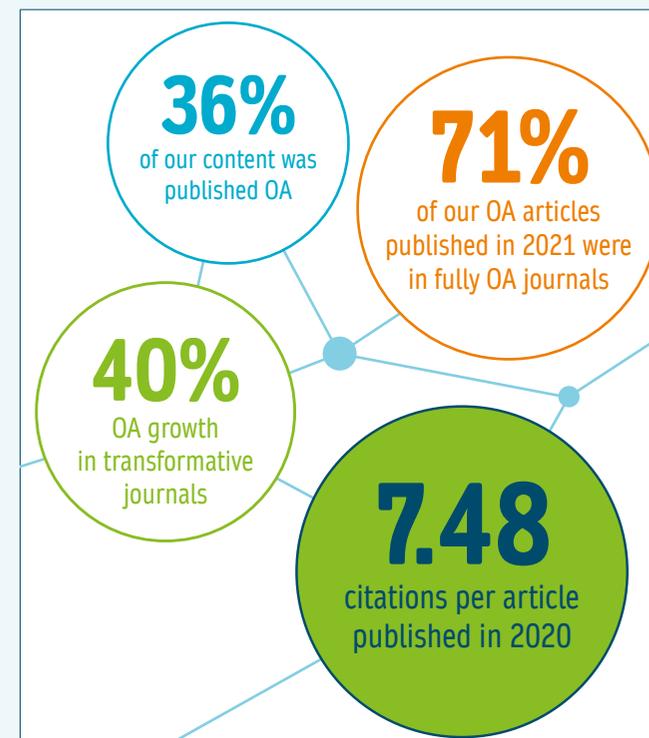
In 2021, five transformative journals became fully OA journals.



As somebody who has published over 100 OA articles, I am a convert – it is by far the most effective way for science to change the world that we live in.

DAN O'NEILL
ROYAL VETERINARY COLLEGE, UK

OA IN NUMBERS¹



CITATIONS PER OPEN ACCESS ARTICLE GREW BY 50% IN 2017-2020²

2020	7.48
2019	6.08
2018	5.24
2017	4.98

¹ 2021 figures except where otherwise stated.
² Includes content published in fully OA and transformative journals (TJs).

OUR MARKET-LEADING PORTFOLIO AND REACH OF AROUND 3,000 OA JOURNALS

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*
- over 580 other fully OA journals.

After *Scientific Reports*, our leading fully OA journals in 2021 by downloads were *Nature Communications* and *BMC Public Health*. Our fully OA portfolio has the highest number of total citations (7.39) of any publisher.

Our portfolio of transformative or hybrid journals:

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

When considering how much research content is downloaded and read by others, Springer Nature offers the best value for money compared with other publishers.

Average cost per article use is half that of our nearest mixed model competitor, and 30% lower than the nearest pure OA competitor.

RESEARCH PUBLISHING — A BUSINESS MODEL IN TRANSITION

How published research is paid for is changing, to bring more people together with access to research and enable societal challenges to be solved sooner.

PAY TO READ

Under the traditional business model, which still exists, academic libraries, institutions and corporations pay a subscription for their people to access a range of our journals, eBooks and searchable databases.

PAY TO PUBLISH

Increasingly, funders, researchers and authors don't want research to sit behind a paywall; they prefer it to be published OA where it can be immediately accessed by all at the moment of publication and therefore more widely read, cited and discoverable. With OA publishing we still provide the same service, from submission to peer review to enhancing discovery of manuscripts. And our same standards for acceptance apply, strictly controlled by our independent and in-house editors. But because the user of the research doesn't pay, the business model is inverted

and shifts to payment based on an article-level publication rather than journal-level subscription.

Instead, the author, usually through their research funding, pays an article processing charge (APC). These are harder to finance in lower-income countries, and some specific research disciplines, so for all our fully OA journals we have an APC waiver and discount policy for research that deserves to be published but whose authors can't afford it.

In 2021, our fully OA journals waived fees of more than €18.4 million for authors in financial need, including €6.6 million for researchers in lower-income countries.



WE WERE THE FIRST TO DEVELOP DEALS CALLED TRANSFORMATIVE AGREEMENTS

TRANSFORMATIVE AGREEMENTS

To help accelerate OA on a large scale, we were the first to develop deals now called transformative agreements (TAs). They are typically agreed at a country or consortium level, and enable participating institutions to combine journal subscription access along with OA publication costs, for a single fee. 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. These agreements make the administration of OA simpler for both the institutions participating and their researchers.

They also enable a wider group of researchers to benefit from the enhanced discoverability, increased citation and increased usage of OA content, and help to solve the problem that some academic disciplines, like the humanities and social sciences, lack OA funding. A centralised APC allows any researcher from the participating institution, regardless of academic discipline, to publish OA.

In 2021, we signed a TA with the Council of Australian University Librarians, a consortium covering all 47 member universities in Australia and New Zealand. We also signed agreements in Canada, Egypt, Ireland, Italy, Latin America, and Spain.



“

After already seeing a tripling of OA articles published by University of California since our landmark 2020 agreement, it is clear that together we are supporting the transition to OA and all that is the future of open science.

CAROLYN HONOUR
CHIEF COMMERCIAL OFFICER

SOLUTIONS TO OPEN UP SCIENCE

Over the past 25 years, technology has enabled three stages of transformation in research publishing. The first was print to digital.

Then came OA, the ‘reader revolution’, because it removed barriers to research being read and used. We are now entering the expansion phase, which puts the researcher at the centre. We aim to combine technology, tools and services to help them succeed in conducting their research and evaluating the results. In doing so, we are moving ever closer to our goal of becoming a platform for open science and innovation, involving the entire research network, where all outputs of research, including data, code, protocols and methods, are made freely available. This way, research cannot only be used but reproduced and interrogated – increasing trust and integrity.

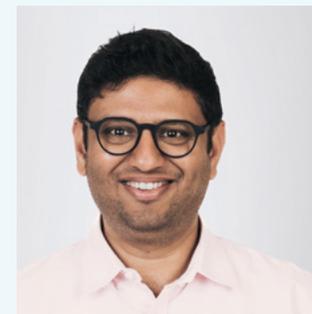
If we can accelerate the transition to OA, the prize is a faster and more effective research system, delivering solutions to the world’s urgent challenges.

The pandemic is a good example of how this can happen. Within one month of the first reported COVID-19 case, the virus had been sequenced and this made openly available. Scores of researchers shared their early findings, which were then tested and refined in real-time, transparent discussions. At Springer Nature we published over 24,000 pieces of research on COVID-19 and made available for free

over 70,000 relevant articles and book chapters and, via Research Square, over 10,000 COVID-19 preprint articles. Today, thanks to open science, we have vaccines and boosters, and a much clearer understanding of the virus, which is informing government actions and policies.

By focusing on researchers, we aim to deepen our relationships with them in all their roles, as authors, editors and peer reviewers. Using the latest technology and partnerships with leading tech companies, we’ve built numerous solutions to help them advance discovery – along with our customers across the research network, from funding agencies to research institutes.

We partner with others, such as Figshare and Code Ocean, to offer our authors ways to openly and easily make their data and code available.



“

Our platforms for open research, including SpringerLink and nature.com, supported 2.6 billion engagements in 2021 and over 2.5 million visits per day.

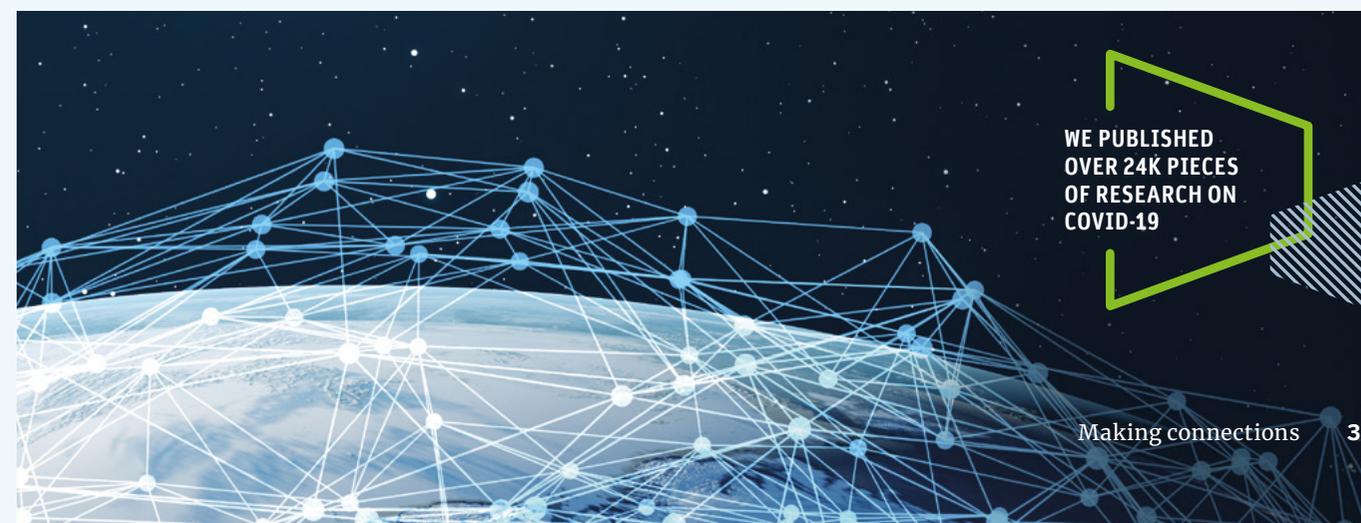
HARSH JEGADEESAN
CHIEF SOLUTIONS OFFICER

RESEARCH SOLUTIONS

Preprints are an author’s version of a research paper, prior to peer review, which they place on a public server. Our free service, In Review, enables researchers to share their work early, by allowing them to automatically deposit their manuscript as a preprint when they submit it to a journal. This early sharing of research encourages community engagement, promotes transparency and gives early visibility to potentially significant science. Our digital editing service is a flexible tool to improve academic writing prior to submission. It is powered by AI, trained on millions of edits by our editors from around 450 areas of study. We also offer translation tools, combining ML and expert human input. Through our Nature Masterclasses training courses, we provide online training for researchers throughout their careers.

DIGITAL AND ANALYTICS SOLUTIONS

These tools help people in academia, government and corporate research institutes to make informed choices on strategies and funding. Our newly launched Nature Research Intelligence service uses Nature’s 150 years of research expertise, and AI, to bring information and data to decision-makers, through customised reports into relevant research and metrics to track progress. Nature Navigator enables users to stay on top of the latest news and developments in their chosen field, and to quickly collate bespoke summaries of any research topic, institution or person. Specialised solutions include AdisInsight, a database for drug research and development, SpringerMaterials and Springer Nature Experiments.



WE PUBLISHED
OVER 24K PIECES
OF RESEARCH ON
COVID-19

JOINING IT ALL UP

WHERE WE CAME FROM
HOW WE DID IN 2021
AND WHERE WE'RE GOING

On 10 May 1842, the day of his 25th birthday, Julius Springer founded a bookstore and publishing house in Berlin, with four employees.

SPRINGER



OVER 180 YEARS
OF KEEPING
SCIENCE MOVING

MACMILLAN



London, 1843, two young Scottish brothers, Daniel and Alexander Macmillan, launched a publishing company with the goal of promoting great writing.

SPRINGER FOUNDED
IN BERLIN

1842

MACMILLAN FOUNDED
IN LONDON

1843



1865

LEWIS CARROLL'S
ALICE'S ADVENTURES IN WONDERLAND
PUBLISHED BY MACMILLAN

1869

NATURE
JOURNAL
LAUNCHED

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, having printed a translation of Marie Curie's *Research on Radioactive Substances*, and establishing a celebrated roster of contributors that included Albert Einstein.

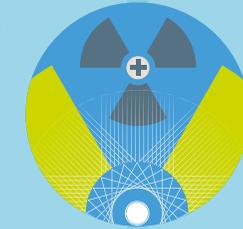
The Macmillan brothers, meanwhile, had made their mark on the literary world by publishing books like Lewis Carroll's *Alice's Adventures in Wonderland*, Rudyard Kipling's *The Jungle Book*, and works by Alfred Lord Tennyson, Thomas Hardy and W.B. Yeats, among many others. As the brothers' business grew, so did their belief in the importance of learning.

In 1869, following Alexander's death, Daniel launched the scientific journal *Nature*, setting out a mission that endures and is articulated today as: "First, to serve scientists through prompt publication of significant advances in any branch of science, and to provide a forum for the reporting and discussion of news and issues concerning science. Second, to ensure that the results of science are rapidly disseminated to the public throughout the world, in a fashion that conveys their significance for knowledge, culture and daily life."

Nature soon gained prominence, publishing Henry Faulds' findings on fingerprinting, which established the basis for forensic science; a description of X-rays by discoverer Wilhelm Röntgen; and a paper by Raymond Dart contending that humankind originated in Africa, not Eurasia, as many believed. In 1953, James Watson and Francis Crick's famous paper in *Nature* announced the discovery of the structure of DNA.

SPRINGER PUBLISHED A TRANSLATION
OF MARIE CURIE'S RESEARCH
ON RADIOACTIVE SUBSTANCES

1904



1896

NATURE CARRIED
THE FIRST DESCRIPTION
OF X-RAYS IN ENGLISH
BY WILHELM RÖNTGEN

1880

HENRY FAULDS
PUBLISHED AN ARTICLE
ON FINGERPRINTING IN
NATURE, THE BASIS FOR
FORENSIC SCIENCE

SPRINGER

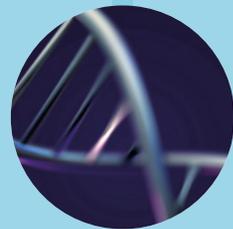


1928

C.V. RAMAN DISCOVERS THE RAMAN EFFECT AND RECEIVES THE 1930 NOBEL PRIZE IN PHYSICS

ROSALIND FRANKLIN OVERSEES THE TAKING OF AN X-RAY IMAGE OF CRYSTALLIZED DNA

1952



1964

SPRINGER LAUNCHES SUBSIDIARY IN NEW YORK. 1970-1990 SAW EXPANSION INTO LONDON, TOKYO, PARIS, HONG KONG, BARCELONA AND BUDAPEST

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.

SCIENTIFIC REPORTS IS LAUNCHED, NOW THE WORLD'S LARGEST OA JOURNAL

2011



2015

SPRINGER NATURE

SPRINGER+BUSINESS MEDIA MERGES WITH MACMILLAN SCIENCE AND EDUCATION, TO CREATE SPRINGER NATURE

2020

SPRINGER NATURE BECOMES CARBON NEUTRAL FOR ITS DIRECT OPERATIONS: OFFICES AND WAREHOUSES, FLEET AND FLIGHTS

2021 IN FOCUS...



2021

Springer Nature leads the way in OA, being the first company to publish more than one million OA articles.

MACMILLAN



1916

FROM HERE ON, MACMILLAN PUBLISHED ALL OF W.B. YEATS' WORK

Meanwhile, Macmillan's Palgrave imprint, created to promote academic scholarship, had also built a strong reputation by publishing books destined to become classics, like *The General Theory of Employment, Interest and Money* by John Maynard Keynes. Later, under the chairmanship of former British Prime Minister Harold Macmillan – Daniel's grandson – Macmillan also became established as a world-leading educational publisher.



1985

NATURE PUBLISHES PAPERS ON DNA FINGERPRINTING, ADVANCING KNOWLEDGE OF HOW GENES AFFECT DEVELOPMENT

1997

A PAPER DESCRIBING DOLLY THE SHEEP, THE FIRST MAMMAL TO BE CLONED FROM AN ADULT CELL, PUBLISHED IN NATURE



2000

BMC LAUNCHES AS FIRST COMMERCIAL OA PUBLISHER

2005

NATURE PUBLISHING GROUP'S FIRST FULLY OA JOURNAL IS LAUNCHED

2021 IN FOCUS PROVING OUR RESILIENCE

During our long and rich history, we've been through some hard times due to global crises, whether economic, geopolitical or even, more recently, health related.

Throughout these, global research activities have hardly seen a downturn. Research spending, global research output and the number of active researchers across all regions of the world have seen continued steady growth for decades. As a result, our business has remained very resilient even through the toughest economic times.

While the COVID-19 pandemic did cause immeasurable harm to lives and livelihoods, again our business has been less negatively affected than many other sectors. Part of this was thanks to the dedication and hard work of our colleagues, in trying circumstances. And part was because, contrary to our expectations, governments did not cut public spending due to the health crisis. Money was still available for research. Research activities and the volume of academic publishing increased faster than in previous years, as a result of the pandemic. The shift away from print towards digital – a trend further accelerated by COVID-19 – worked in our favour too. Our education and professional services also rebounded, helping us have a successful year, both financially and in our operations, and delivering more value for our customers.

In this section:

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GROUP FINANCIAL REVIEW

It is our goal, year on year, to realise stable, profitable growth and long-term value for all our stakeholders, in a sustainable way.

We measure this financial performance using two main indicators, revenues and operating profits, and their underlying trends over time.

In 2021, Group revenues showed underlying growth of 6.5%, reaching just above €1.70 billion. In our Research segment, underlying revenue growth was around 5% in 2021, well ahead of market growth and that of most of our competitors. Our Education and Professional segments showed strong recovery and underlying growth.

Driven by the strong revenue growth and careful cost management adopted in response to the economic uncertainties caused by the pandemic, our adjusted operating profit rose by 12% to €443 million in 2021. The pandemic also affected the recruitment market and throughout 2021 we found it difficult to fill many vacancies across almost all our business areas. The contribution this cost saving made to our profits was, however, only small compensation for having fewer people than we needed, adding to the workload for our team at a difficult time.

The solid development of operating profits as well as further acceleration in our licence renewal and collections processes resulted in very strong operating cash flow in 2021. This allowed us to maintain our high investment levels – including approximately €120 million of investment and operating spending in products and technology (see more on page 46) – to reduce net financial debt by around €150 million, and to contribute c.€90 million of corporate income taxes where we do business. During the year, our overall financial position

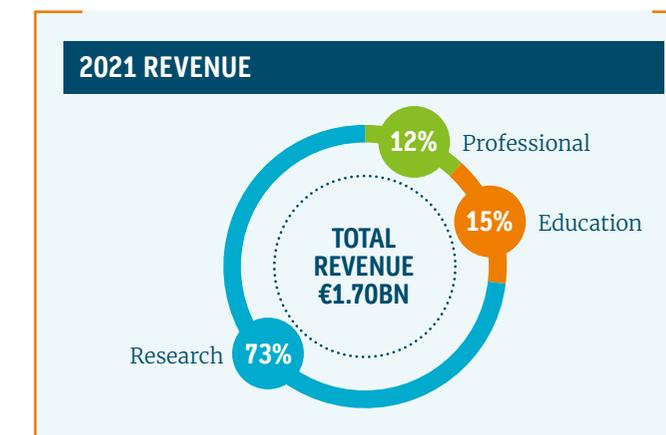
improved strongly, which allowed us to lower our leverage and improve credit ratings.

Our Health segment has been newly set up as a reporting segment and so will appear in financial reporting from 2022 onwards.

Growing our business

We were also able to acquire several new titles and businesses, including:

- Atlantis Press
- Synthesis Digital Library of Engineering and Computer Science
- *British Journal of Cancer*
- Dentalllect e-learning platform
- specialist medical journals on pain and anaesthesia.



INVESTING FOR OUR COMMUNITIES

Investing in improved technology and services

Our strong 2021 financial results allowed us to continue our strong investment in technology to deliver better products, services and solutions, publishing processes and other digital business capabilities. We maintain these high investment levels to further digitise and integrate the systems used to manage our business operations. This included approximately €120 million of investment and operating spending in products and technology during the course of the year.

Our goal is to create a faster, more efficient and user-friendly publishing workflow system. This will enable us to provide a superior user experience for authors, editors, peer reviewers and all those involved in the publishing process. We've increased investment in our proprietary journal publishing platform, Snapp, for our 3,000 journals. Alongside this, we've developed a new system to make the OA publishing experience easier for authors. In 2021, we created a new, dedicated technology unit to focus on identifying and developing the opportunities to use big data and ML to improve the overall publishing experience by, for example, improving journal and peer-reviewer selection and manuscript transfers. Our rapidly expanding technology teams include specialists in

AI and ML. We're using these new technologies to support research integrity, by investing in AI tools to help identify plagiarised, manipulated or otherwise problematic content. And, we're developing improved sales, marketing, fulfilment and procurement capabilities based on the latest technologies and cloud-based infrastructure solutions.

Investing in our people and our communities

In 2021, we made additional investments across many other areas of the business too. In response to feedback received through our regular employee engagement survey, we set aside increased training and development funds for our colleagues. We created a new team dedicated to improving engagement with our external editorial communities and put investment behind initiatives to make their lives easier. We continue to ramp up our sustainability programmes, creating a new team and increasing investment in energy-saving initiatives and education. Our diversity, equity and inclusion (DEI) initiatives continue to grow, both to best enable all our employees to thrive and to champion DEI in our communities, with improved data processes so we can monitor our progress. In 2021, our fully OA journals waived article processing fees of over €18.4 million to authors in financial need.



We are a stable, resilient business that can create profitable growth in almost every macroeconomic environment — and that allows us to invest for the benefit of our communities.

ULRICH VEST
CHIEF FINANCIAL OFFICER

HOW WE PERFORMED

	2019	2020	2021
GROUP			
Revenue (€/millions)	1,718.9	1,626.7	1,700.9
Underlying growth ¹	2.8%	-3.5%	6.5%
Adjusted operating profit (€/millions) ²	410.8	396.2	443.4
Underlying growth ¹	5.5%	-0.6%	7.5%
Operating margin	24%	24%	26%
RESEARCH			
Revenue (€/millions)	1,248.2	1,256.7	1,305.8
Underlying growth ¹	3.1%	1.6%	5.5%
EDUCATION			
Revenue (€/millions)	257.4	175.8	183.8
Underlying growth ¹	2.9%	-23.9%	11.3%
PROFESSIONAL			
Revenue (€/millions)	213.3	194.2	211.3
Underlying growth ¹	1.5%	-9.1%	8.5%

- ¹ Underlying growth rates represent year-on-year growth rates that exclude both the impact of changes in scope of consolidation and also the impact of changes in foreign exchange rates versus our reporting currency (Euro).
- ² Adjusted operating profit, excluding capital gains and losses nor 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).

SEGMENT REVIEWS — RESEARCH IN 2021

Our research segment had a successful year under favourable market conditions.



STEVEN INCHCOOMBE
Chief Publishing Officer

A RECORD-BREAKING YEAR

The volume of global research continued to grow, boosted by the quest for discoveries around the pandemic. This in turn enabled us to publish more quality research than we have ever done before. And this knowledge was used more widely than ever; usage continues to climb, with page views, downloads and citations for both articles and books demonstrating increasing value for our authors.

Revenue growth outpaced the market and that of our key peers. It was driven by our OA business and the strong performance of our Nature Portfolio journals. Revenues from our more than 580 fully OA journals jumped by 22%, thanks to the increased volume of research published. *Scientific Reports*, which accounted for more than

a fifth of our OA articles, and *Nature Communications* drove the growth, along with the medicine and life sciences journals, boosted by their COVID-19-related research.

Academic institutions expanded their subscriptions across the Nature Portfolio. We also successfully launched new Nature research journals, proving that the brand is valued and trusted enough within the community for a fresh title to immediately attract new submissions and subscriptions.

In our books business, around 40% of our revenues are generated from print titles. The pandemic accelerated the shift to digital formats, resulting in higher sales of eBooks and eBook collections. Increased advertising sales, and data and analytics services, boosted our solutions revenues.



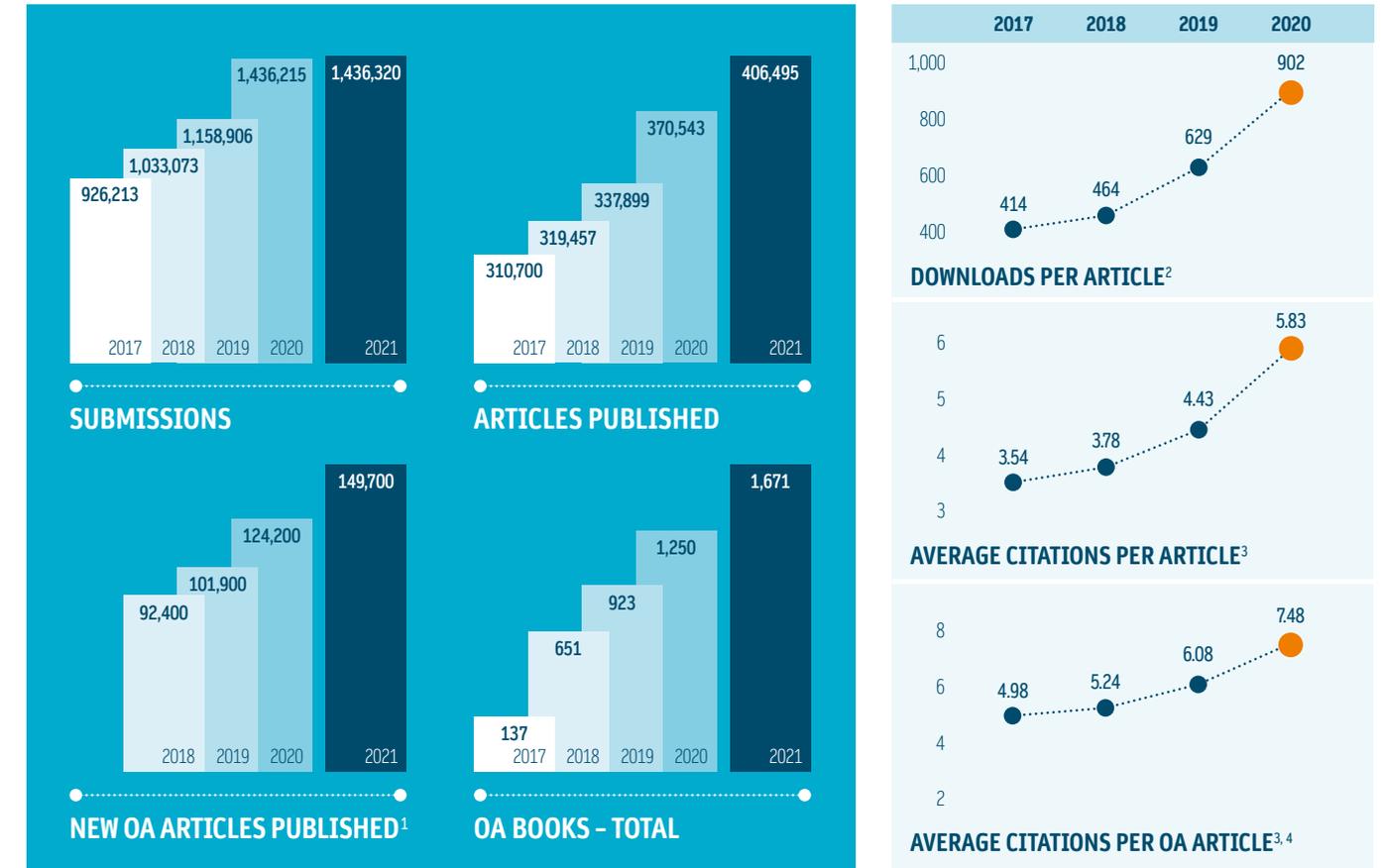
ALISON MITCHELL
Chief Journals Officer



I choose to publish in *Nature Communications* because I want to make sure that my work is accessible to everyone, and it's a very good OA platform to do that. It increased the audience base for my work, and increased scientific knowledge.

XINGCAI ZHANG
MIT SCHOOL OF ENGINEERING, US

We're handling more submissions, publishing more content and an increasing amount is open access.



In 2021, our transformative journals saw OA research article growth of 40%. Our aim is for 50% of all primary research published by Springer Nature to be OA by 2024.

Research published by Springer Nature is used, shared and built upon by others more and more each year, enabling the research community to collaborate to develop solutions to the world's biggest challenges.

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

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 2021 articles as 2022 citations not yet complete.

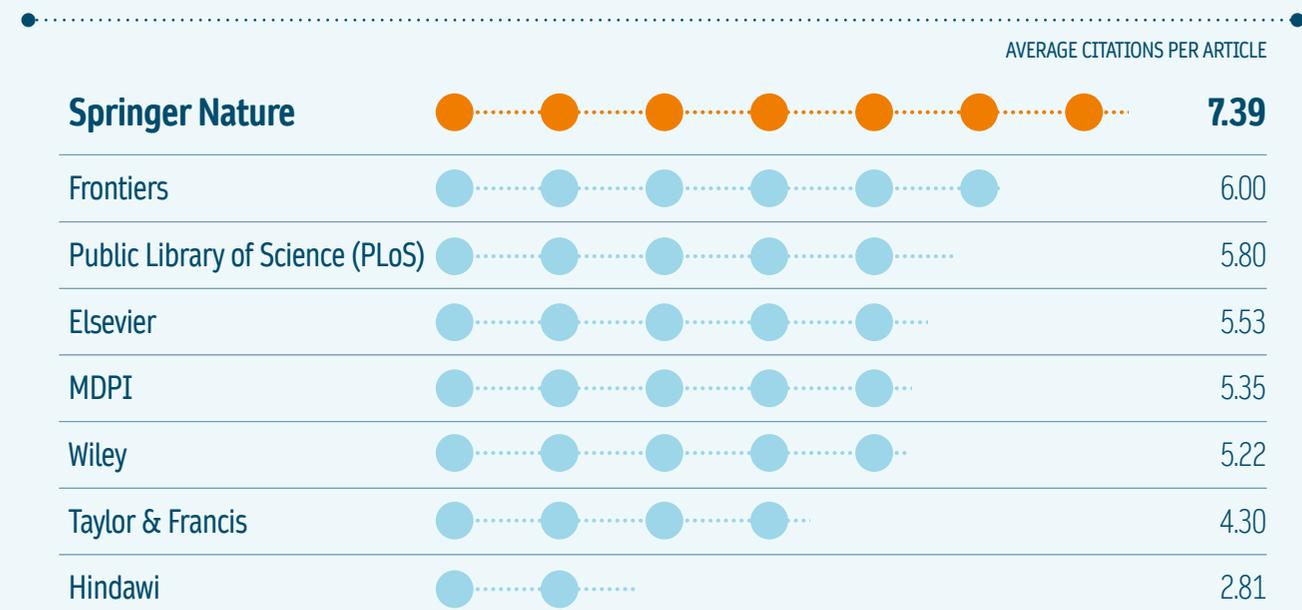
⁴ Includes articles in transformative and fully OA journals.

SEGMENT REVIEWS — RESEARCH IN 2021 CONTINUED

We're able to deliver increasing value for money to the community. The average cost for each use of an article in our fully OA journals was €0.24 in 2021, 30% lower than our nearest pure-OA competitor.

Our fully OA portfolio goes from strength to strength, achieving more reuse for authors than any other publisher in the sector.

CITATIONS PER FULLY OA ARTICLE, TOP EIGHT PUBLISHERS¹



¹ Digital Science, Dimensions, fully OA articles published in 2020 with average citations in 2020 and 2021 per article. Chart taken from Springer Nature Advancing OA report, available at fullyopen.springernature.com.

SEGMENT REVIEWS — EDUCATION IN 2021

BOUNCING BACK IN THE CLASSROOM

The pandemic significantly affected our Education segment in 2020, with school closures and lockdowns making it hard to serve our customers. Our main focus in 2021 was on getting the segment back on track, and despite the difficult operating conditions, we succeeded, with underlying revenue increasing by 11%.



Macmillan Education's pre-primary materials make learning visible, with teachers and students observing and investigating the environment while using English in a natural context.

KELLY BARBOZA DA SILVA
COLÉGIO JARDIM SÃO PAULO, BRAZIL

The English language teaching business grew in most of our markets, particularly Europe and Mexico. Sales were still subdued in some regions due to ongoing school closures and lower enrolment in private language schools.

In our school curriculum business, sales to governments drove the strong recovery in Mexico and South Africa. Postponed curriculum changes and delayed orders for new books mean there is still much scope for improvement in 2022.

Following a strategic review, we sold our higher education business in mid-2021, to best focus on our core markets.



JOACHIM KRIEGER
Managing Director
Education and Professional

SEGMENT REVIEWS — PROFESSIONAL IN 2021

DRIVING GROWTH

We saw robust growth across all business units in our Professional segment in 2021. Underlying revenue rose by 8%. Our events business was still constrained by COVID-19 restrictions, and virtual conferences did not provide the same appeal for our customers. There was also cautious spending in some professional industries, due to the pandemic. But the medical publication business in Germany and the Netherlands, which accounts for nearly half our professional business, saw increased revenues, mainly due to higher advertising spending by the pharmaceutical industry.

Our road safety business also enjoyed a good year, with many driving schools reopened. Driving simulator sales were also strong.



GROUP PROGRESS OUTLOOK

We started 2022 with strong momentum in all our business segments, and expect growth to continue as the world learns to live with COVID-19. By using our connections in the research communities and demonstrating the value offered when publishing with Springer Nature, we will continue to increase the number of articles and books that we publish and expand our service offering to the wider research community. This will support our goal of continued solid underlying revenue growth. We aim to achieve this through investing in technology and in our people, and by:

- accelerating the transition to OA and open research
- migrating from print to digital, especially for books, education and professional content
- expanding our research solutions and health businesses to best meet customer needs
- improving our efficiency to better serve our communities, using tools like AI and ML
- continue to look for opportunities for growth through acquisitions and cooperations
- ensuring that Springer Nature is a great place to work and thrive.

OUR REVENUE GROWTH WILL BE UNDERPINNED BY INVESTMENT IN TECHNOLOGY AND OUR PEOPLE

In response to the Russian invasion of Ukraine, which we strongly condemn, we stopped all new sales and marketing of products and services to research institutions in Russia and Belarus. The war has had a big effect on global financial and commodity markets, resulting in strong increases in inflation, global revaluation of asset and commodity prices and increased cost of financing around the world. This is likely to affect our 2022 results, but we believe that our core business will remain resilient and that the implications of the material changes and increased volatility in the financial markets will be manageable for us.



COMBATING MISINFORMATION THROUGH SCIENCE

It's rare for science to lead the news for months on end. But that's what happened when the pandemic started.

The race to understand COVID-19, and to find solutions to reduce its severity and spread, helped raise awareness among the public of the importance of scientific research. In 2021, the Edelman Trust Barometer showed a large jump – a net increase of 43 points – in those who said they wanted to ‘increase their scientific literacy’. The same global survey also concluded that a ‘rising tide of misinformation and mistrust’ was threatening the recovery from COVID-19, and that people were looking to scientists for news they could trust. Both findings point to the important role that we at Springer Nature have to play to combat falsehoods and ensure accurate understanding of the facts.

Speed and accessibility of trusted research and analysis is crucial. That's why we offer our authors the option to share their manuscripts online as a preprint, before peer-review. Since 2019, we've made available more than 10,000 COVID-19 preprint papers via Research Square and published 70,000 new articles related to the pandemic, also supporting researchers to share their experimental data sets for all to use. We're also investing in the latest tools and technologies, including AI, and growing the team that assures the integrity of the research process.

“ Standing up for science and scientific reasoning is increasingly important as we battle a growing tide of misinformation.



JOYCE LORIGAN
Group Head of Corporate Affairs

COMMUNICATING SCIENCE TO A WIDE AUDIENCE

In addition to the research content itself, we communicate science in numerous other ways:

- **Science journalism:** Our journalists and bloggers reach many millions of people every month. Over 12 million visit the *Nature* and *Scientific American* websites, 6.5 million follow the brands on Twitter and millions more around the world listen to their podcasts. The daily source of science news, *Nature Briefing*, has an annual reach of 1.4 million.
- **Unique content:** Four new content series were added to the Springer Nature YouTube channel in 2021 sharing perspectives on topical issues that affect our world. New blogs and newsletters were also launched.

- **Promoting research to the media:** Our journals and editorial press team works with editors and authors of research to share high-profile insights with science journalists and news reporters. In 2021, research we published generated over 100,000 news articles.
- **Supporting SDGs:** Our SDG programme connects crucial research with those who need it most, via dedicated web pages, resources and events, as well as guidance for researchers on sharing their research with wider audiences.
- **Addressing policymakers:** In 2021, *Nature* editor-in-chief Magdalena Skipper addressed the science summit at the UN General Assembly with a call to recognise science's role in combating global challenges. Our annual Science on the Hill series of events brings researchers to Capitol Hill, in Washington DC to discuss the latest science with politicians and staffers.

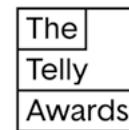
WE'VE LAUNCHED NEW CAMPAIGNS TO HELP TAKE SCIENCE TO A WIDER AUDIENCE



Science Stories showcases exciting and inspirational stories, told by researchers themselves.



Nature Briefing has an annual reach of 1.4 million.



In 2021, *Nature's* multimedia team won several prestigious awards.

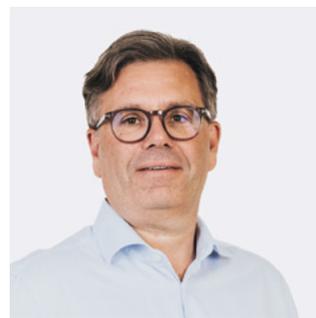


Our annual Science on the Hill series brings researchers to Washington DC.



SUPPORTING OUR PEOPLE

At Springer Nature we provide the culture and environment for our talented people to do brilliant and rewarding work, treating them with fairness and respect and supporting their needs so that they can achieve their potential.



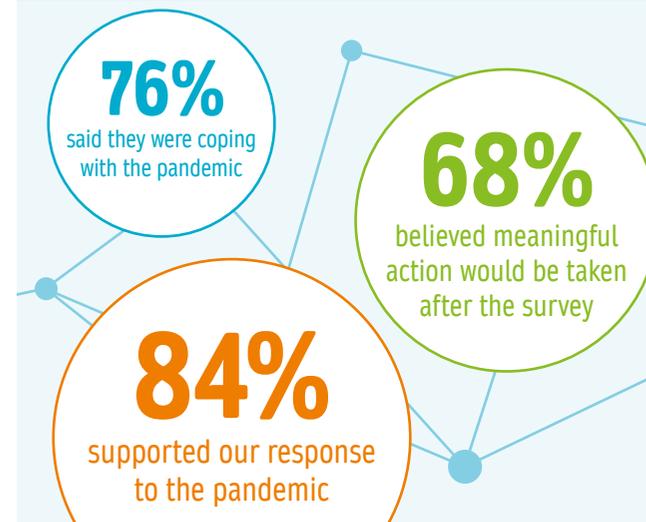
GREGOR KAROLUS
Chief Human Resources Officer

We do this by promising a workplace where our diverse workforce of around 9,000 colleagues in 45 countries can develop and grow, challenge what they are capable of, and be themselves every day at work.

To help steer our culture we have four clear 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 SURVEY HIGHLIGHTS



KEEPING ENGAGED THROUGH DIFFICULT TIMES

Just as we open doors to discovery for the research community, we also open doors to each other, at all levels, to enhance communication and cooperation. We measure how we are doing in these and other areas, from career growth to work-life balance and managing our pandemic response, through regular employee surveys. In our second employee survey of 2021, more than two-thirds of our colleagues took part, sharing more than 5,000 comments.

Following this, the executive team was determined to keep workload and wellbeing high on their agenda. This started with more conversations between employees and managers about work-life balance, enabled by resources available through an online wellbeing community. We also launched a new global employee assistance programme.

We supported all our colleagues to work from home during the pandemic, and with their phased return to the office



when lockdowns were eased. Every week we hosted a video chat, and a blog update with our CEO, Frank Vrancken Peeters. Employees could sign up for virtual coffee breaks with members of our management board, so they could hear from people about their experiences and concerns.



We were awarded the Best Leadership Communications award at the CorpComms Awards 2021, in recognition of the efforts made to keep staff connected during the pandemic.

While this new hybrid way of working offered some benefits, it also had downsides for many people for whom collaborating with colleagues more regularly is an important part of working life. We launched multiple global learning campaigns to provide more opportunities to connect people across our locations and help them be successful in the hybrid work environment. In recognition of additional workloads exacerbated by the ongoing pandemic, we offered colleagues an extra day of leave in 2021.

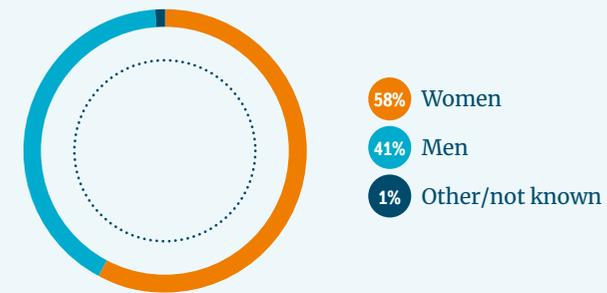


It's wonderful to see teams across the organisation working hard to make our workplace more inclusive.

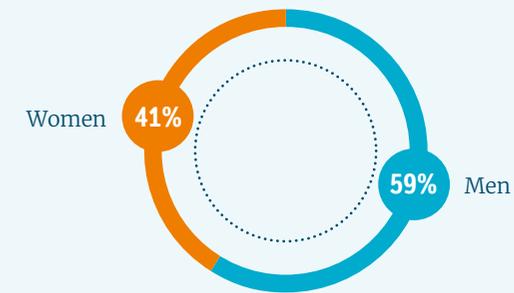
JESSICA GEDAMU
VP GLOBAL DIVERSITY, EQUITY AND INCLUSION



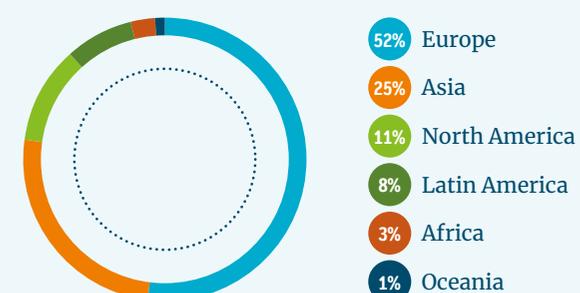
GENDER SPLIT — GROUP-WIDE¹



GENDER SPLIT — TOP THREE TIERS OF LEADERSHIP¹



EMPLOYEES BY CONTINENT¹



EMBRACING OUR DIFFERENCES

Our award-winning DEI approach puts people first – promoting openness, wellbeing and flexibility to create a great place to work where people are friendly and supportive and where everyone's voice is heard.

In 2021, for the first time, we held a global inclusion and diversity survey to gauge different communities' experience of inclusion, and to support our efforts to make the workplace more inclusive. Around 62% of employees took part, and the results help drive our next steps, including a mentorship programme available to groups who have a lower experience of inclusion or are under-represented in leadership, and a new set of goals for race and ethnicity representation. The global inclusion and diversity survey will be held annually.

We are determined to keep improving our gender representation. In 2018, we set a goal of women filling 45% of the posts in our top three leadership tiers by 2023. We reached this target in 2020 but slipped below it in 2021, ending at 41%. Despite this, the overall trend is positive. In 2022, we will launch a new strategy focusing on equitable recruiting, promotion and succession.

Our seven employee networks, with 1,400 members, unite colleagues who share an identity, and focus on fostering dialogue around diversity, community building, advice and advocacy. These global networks have 34 local chapters, and held more than 50 events in 2021.

In 2021, we increased our focus on anti-racism and representation across the company. We hold partnerships with several external organisations, including Stonewall (which promotes LGBTQ+ rights), the Black Young Professionals Network (which connects Black professionals with career opportunities) and Purple Space (a networking hub for disabled employees).

¹ All data on this page at December 2021.

SUSTAINABILITY



THEA SHERER
Director of Sustainability

ADVANCING PROGRESS, THE RIGHT WAY

Our work enables us to be a force for good in the world. By publishing vital, trusted research and analysis we increase the understanding of issues affecting humanity, and help identify and refine solutions. But being a responsible company requires more than just doing good; it means doing things the right way, at all times. As a sustainable business, we're determined to minimise our impact on the environment. As an ethical one, we're committing to upholding the highest standards of human rights in our supply chain. And to help make sure we serve our customers and communities fairly, we take action to inspire positive change.

ACCELERATING SOLUTIONS

The 17 SDGs are designed to address some of the world's most urgent challenges, from poverty to inequality. We believe our greatest contribution towards achieving the SDGs is through our work, which is why our goal is to be the SDG publisher of choice. We've published more than 390,000 articles or book chapters relevant to the SDGs since the goals were launched in 2015, and they've been collectively cited more than 3.5 million times.

Through the Springer Nature Research Integrity Group (SNRIG), we strive to ensure all our work meets the highest editorial and ethical standards, to ensure public trust is maintained. In 2021, the SNRIG reviewed more than 1,400 cases from the over 1.4 million submissions we received, taking corrective action where required.



€527,000 IN DONATIONS IN 2021

PROTECTING THE ENVIRONMENT

As a leading publisher of climate research, we have a responsibility to follow the science. In 2020, for the first time, we became carbon neutral for emissions from our offices, fleets and flights, by purchasing green electricity, renewable energy certificates and carbon offsets. In 2021, our initiatives included:

- committing to set science-based targets to reduce carbon emissions in line with what is required to limit global temperature increases to 1.5°C. These targets will be independently verified
- signing the Climate Pledge, joining more than 200 other businesses in committing to regular reporting, carbon elimination and credible offsets, with a goal of reaching net zero by 2040, taking into account emissions from our wider value chain
- appointing a Climate Action Officer, Thea Sherer, our Director of Sustainability, who will coordinate our net zero commitments.

We've been awarded a silver rating by Ecovadis, putting us in the top 25% of all companies rated for their environmental, social and governance (ESG) performance, and our 2020 Sustainable Business report was awarded with a 'best in the world' award, in the publishing category, by Hallbars.

ACTING ETHICALLY

As part of our commitment to human rights, we:

- **do not tolerate any form of corruption** by any person representing Springer Nature, and also prohibit it in our supply chain
- encourage our employees and business partners to use our **whistleblowing** system
- place a premium on **digital security and data protection** to protect our customers, employees and our reputation
- always pay our **fair share of tax**, with an average tax rate at Springer Nature Group of around 30%.

We are founding partners of Research4Life, which offers subscription content to scholars in low- and middle-income countries for free or at a low cost.

INFLUENCING POSITIVE CHANGE

We've developed an external DEI strategy to ensure we serve our customers and communities in a fair and inclusive way. Examples of the practical steps we've taken:

- **Giving recognition to under-represented groups:** Our Black Employee Network launched a speaker series to celebrate the often overlooked contributions of Black innovators and leaders.
- **Changing names:** In 2021, we announced a new policy to enable transgender authors and others to change their names on previously published works.

GOVERNANCE



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We will take meaningful steps, including making changes to our policies and processes, to widen access to research as part of our overall ambition for an open science future.



RACHEL JACOBS
Group General Counsel

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.

At Springer Nature 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

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** carries out the management of 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, Dr 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 system, risk management system and the internal audit system, the audit of the annual financial statements and other services, and compliance.

COMPLIANCE, RISK AND INTERNAL AUDIT

We have a group-wide compliance system, 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 supported by three other full-time employees. She reports to the Group General Counsel and has regular access to the Management Board and the Audit Committee.

LEARN MORE



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

Springer Nature Group group.springernature.com

Research

Springer Nature springernature.com

Springer springer.com

Palgrave Macmillan palgrave.com

Nature nature.com

BMC biomedcentral.com

Education

Macmillan Education macmillaneducation.com

Health

Springer Medizin springermedizin.de

BSL bsl.nl

Professional

Vogel heinrich-vogel-shop.de



Printed sustainably in the UK by Pureprint, a Carbon Neutral company with FSC® Chain of custody and an ISO 14001-certified environmental management system recycling over 100% of all dry waste.

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falconwindsor.com



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