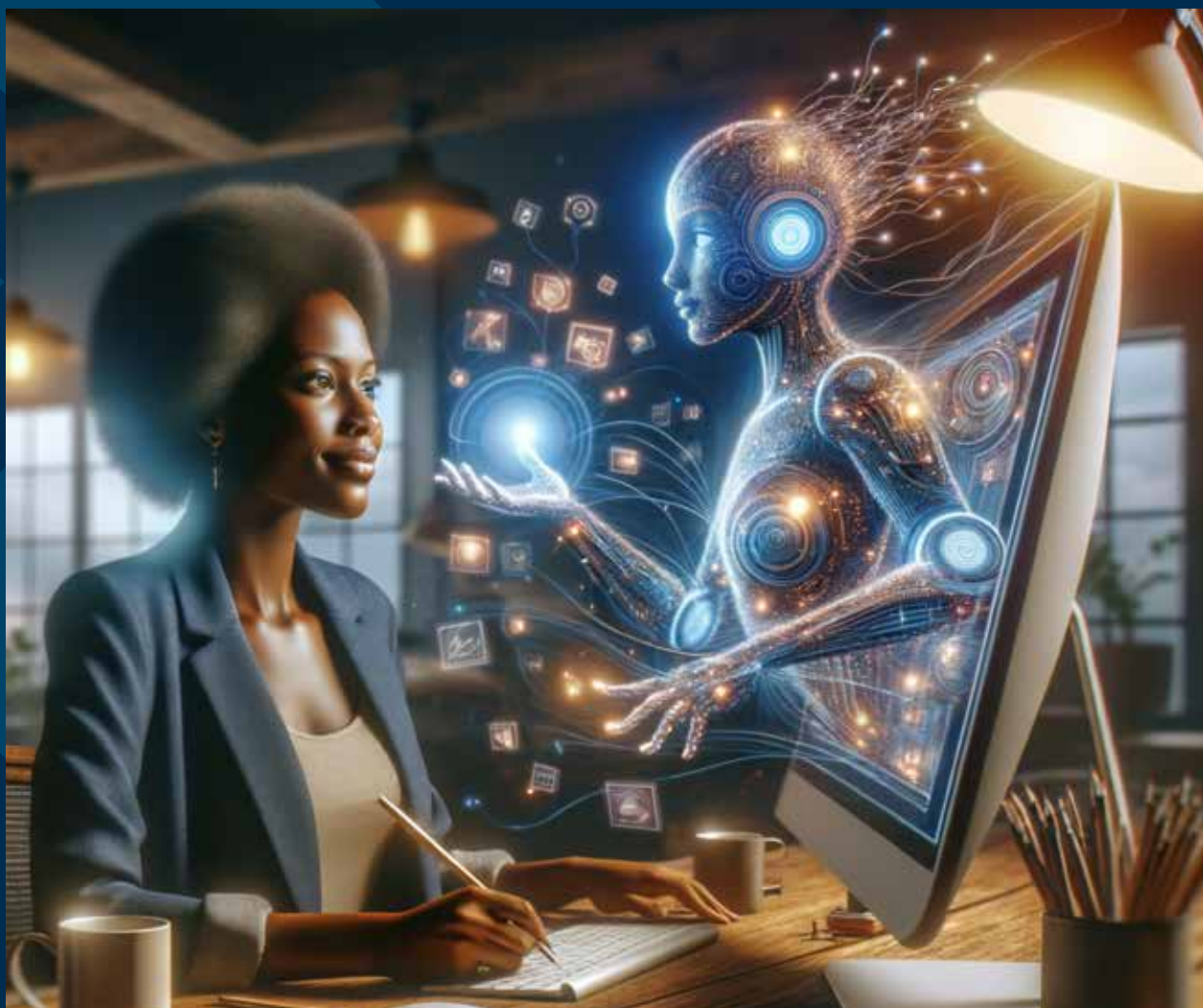


# Living with the Genie

ARTIFICIAL INTELLIGENCE IN CONTENT CREATION  
FOR SMALL BUSINESSES IN TRADE



In collaboration with:



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## ABOUT THE REPORT

This report encourages artificial intelligence (AI) literacy for small businesses and trade institutions, especially in developing countries, through the lens of content creation. It shows that AI tools empower everyone in the workplace to be publishers – and that leaders can navigate the promises and perils that come with AI.

While more than 50% of business support organizations responding to an International Trade Centre survey in December 2023 use ChatGPT and other AI tools, they advise caution and seek guidance. This report responds with insights on the changed world of publishing; managing bias; AI tools to research, write, produce and promote content; and managing organizational change.

AI tools give more freedom to research, write and publish, but users must address issues of misinformation, bias, inaccuracy and plagiarism. The report addresses leaders, managers, writers and communications specialists in trade promotion organizations, chambers of commerce, youth incubators and others providing trade content for developing countries.

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Correction to *Living with the Genie: Artificial intelligence in content creation for small businesses in trade* (2024).

In the above-mentioned publication, the following has been revised: on page ii, the page count and the month issued has been modified; an additional citation has been added; and the contact person has been changed. The TOC has been modified to reflect new text as of page 64, and the page numbers updated. IP and WIPO have been added to the acronyms page. Page vi, new text has been added to the acknowledgments 'Chapter 6: Mathilde Tachon, Programme Officer, Intellectual Property (IP) for Business Division at the World Intellectual Property Organization (WIPO) in Geneva.'

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## REVIEWS

*'AI ultimately will revolutionize every aspect of our lives, but the impact may be the greatest in the world of commerce and employment. You can get a good read on the future in this prescient and gripping report.'*



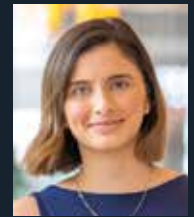
US Navy Admiral James Stavridis, formerly 16<sup>th</sup> Supreme Allied Commander of the North Atlantic Treaty Organization, is author of '2054', a novel of artificial intelligence and geopolitics. He is Chair of the Board of Trustees for the Rockefeller Foundation and the former Dean of the Fletcher School.



*'The benefits of reading, writing, clean water, electricity and plumbing spread only when everyone had access. When a few people favoured by birthplace, birth parents, or by being at the right time in the right place claim benefits, it does not unleash innovation and economic growth.'*

Mei Lin Fung, Chair, People-Centered Internet

*'The report addresses how to incorporate AI in our day-to-day work, to the benefit of our organization, target audience, and employees. We'll share it with our communications, intelligence and innovation departments so we can incorporate the key takeaways of this research into our organization's culture and activities.'*



Ana Laura Vega, Chief of Staff, PROCOMER, the trade investment and promotion agency of Costa Rica



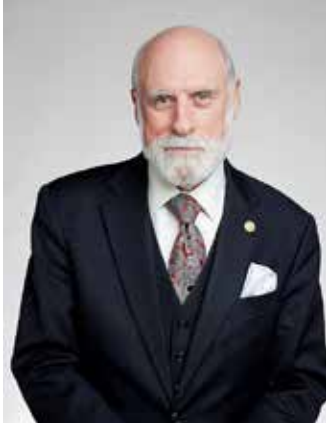
*'The modern AI tsunami has created dramatic new opportunities for international trade. This is a guide for content creators in a time of digital disruption.'*

Gary A. Bolles, Author, 'The Next Rules of Work', and Chair for the Future of Work for Singularity University, which examines technology use and opportunities for positive global impact

*'International relations students need to understand how AI is reshaping diplomacy. Some AI tools are being used in ways that erode trust in society and this has a direct impact on our field. This report will be extremely useful for anyone who wants to understand how to use AI tools, and also how to address the challenges they bring with them.'*



Renaud Dehousse, Rector, Johns Hopkins University, SAIS Europe



BY: **Vinton G. Cerf**

Google Vice President

## PREFACE

# Thoughts on Living with the Genie

If ever a publication were timely, *Living with the Genie* fills that bill.

The emergence of generative artificial intelligence and its accessibility to anyone on the internet creates an unprecedented capacity for pseudo-authorship.

Prompting of generative AI systems is a new form of writing. Given a sequence of prompts, genAI produces remarkable content, and not just text. These systems have been evolved to produce multimedia output: text, imagery, audio and video. They are capable of generating a verisimilitude of human expression that is often articulate and convincing, even when eloquently dead wrong.

If you think of authors as information farmers and their crops as publications, then genAI systems are like fertilizers. That's an apt analogy, considering how much crap is potentially produced! But, as in this metaphor, the genAI systems are enhancers and accelerators of production. Prompting seems a little like genetic editing. The multilayer neural networks of the genAI bots are kind of like DNA and prompting is the text version of CRISPR-CAS9. The results are like GMO crops.

Publishers are like grocery store chains distributing the products and organizing them for ease of discovery and use. Of course, these products also make their way into the World Wide Web through the internet and become discoverable thanks to search engines. And since the genAI bots are trained on content found on the internet, there is a feedback loop that has the capacity to generate yet more content – ranging from crazy to coherent and crossing into plagiaristic territory.

Like all powerful tools, genAI can be used in purposeful and constructive ways, but also in support of harmful and destructive intent, breeding lies and disinformation. This timely monograph shines light into the unlit future of information creation and distribution. Walking into the future without this flashlight is like playing Zork without a lantern. You might be eaten by a grue.

---

*Vinton G. Cerf is Google Vice President and Chief Internet Evangelist, where he has become known for his predictions on how technology will affect society, including artificial intelligence.*

*He is known as a father of the internet, sharing this title with TCP/IP co-developer Bob Kahn. The internet provides the infrastructure that supports the World Wide Web, invented by Sir Tim Berners-Lee.*

## FOREWORD

# AI Literacy for All

Publishing is not what it used to be. Artificial intelligence (AI) in publishing has long been a reality, but the current paradigm shift has a strategic impact on what and how we publish – and has implications for employment opportunities in developing countries.

Sixty years ago, ITC began as an organization founded primarily with the goal of providing trade-related information, which would help exporters navigate a multilateral trading system that was in its relative infancy. While our mandate has since expanded to address the many facets of what it means for small businesses to trade, that emphasis on trade information and intelligence remains. But the world we live in has changed dramatically.

The COVID-19 pandemic led to a jump in digital literacy including for small businesses. Those who flourished were often those who brought digital tools into how they worked. For instance, ITC research found that 11% of businesses that went online during the pandemic to sell their goods and services managed to boost their sales—far outpacing those businesses who did not.

Many of our own counterparts – such as those business support organizations that reach millions of small firms – now use AI regularly in their work. Our December 2023 survey of 73 business support organizations in 39 countries showed that most already use ChatGPT and similar tools.

By the time GenAI arrived on the scene in late 2022, people were better prepared for what a digital landscape could mean for their needs and their goals – with small businesses, young professionals and tech-savvy workers often at the forefront. There was also a growing awareness that, without careful use and without greater advances in digital connectivity, these new technologies could widen the divide between the ‘haves’ and ‘have nots’.

ITC staff are using AI-powered tools in many ways, too. Our Innovation Lab and our SME Trade Academy spent 2023 exploring the topic of AI literacy and AI tools for trade development, including at our SME Trade Academy Forum in September. At our most recent World Export Development Forum in 2023, we also explored how AI affects the national and sectoral export strategies of small businesses.

We are now developing an organizational strategy for AI in ITC's own operations – with a focus on how AI tools can make us more productive, efficient, and innovate in how we approach trade-led development, while making sure we are mindful of the potential pitfalls.

We know that generative content tools streamline the publishing process – from conducting more efficient research, writing and peer review; to speedier graphic production, layout, editing and translation; to innovative outreach and training for critical trade advocacy topics.

Along with the tremendous hype and the obvious benefit for publishing, the warning signs are there. Reports of fake precedents for court cases remind us that AI has its limits. Those limits include copyright infringement, plagiarism, bias, accuracy concerns, reduced critical thinking and analysis, and risks to an organization or an individual's reputation.

This report offers guidance on how to use of AI tools to streamline publishing, while protecting organizations and authors. AI tools are powerful, saving writers and staff considerable time as well as human and financial resources. They free us to work at scale and to innovate in new and powerful ways. How we manage these tools matters.



**Pamela Coke-Hamilton**

Executive Director  
International Trade Centre

**Pamela Coke-Hamilton**

Executive Director  
International Trade Centre

## ACKNOWLEDGEMENTS

Real people are behind the ideas, research, writing and promotion of this report. Literature was read in full. Writing, editing and peer review were done in a traditional way. Editorial discussions were intense, as writers, researchers, designers, journalists and publishing experts from many countries explored their different perceptions around the use of AI tools in the workplace, particularly for publishing in a trade and business development context.

ChatGPT was used to identify duplication, acronyms and definitions that were then cross-checked with other sources and refined; generate a word cloud; summarize references; and test ideas to kick off the illustration process. AI-generated illustrations were developed using Shutterstock, which has an AI image generator and owns the rights to its photos. The illustrations for the cover and chapter openers reflect brainstorming sessions with the authors and Iva Stasny-Brosig of Design Plus. The illustrations reflect a variety of AI viewpoints in publishing.

With gratitude to guest contributors, chosen for their expertise, complementarity and geographic balance.

- **Chapter 1:** Katharina Reinecke, Associate Director of Research, Paul G. Allen School of Computer Science & Engineering, University of Washington, is based in Seattle, Washington, United States.
- **Chapter 4:** Victor Kiprop, business journalist, formerly worked as a reporter and presenter for BBC Africa, the East African and NTV. He is based in Nairobi.
- **Chapter 4:** Joanna Maxwell-Scott, video producer, is based in the Geneva, Switzerland area.
- **Chapter 4:** Deepesh Patel, Editorial Director and Carter Hoffman, Trade Finance Global, is based in London.
- **Chapter 6:** Frédéric Ballenegger, Deputy Head of Communication at the Permanent Mission of Switzerland to the United Nations in Geneva.
- **Chapter 6:** Mathilde Tachon, Programme Officer, Intellectual Property (IP) for Business Division at the World Intellectual Property Organization (WIPO) in Geneva.

Survey of business support organizations: Matteo Takami Todisco, International Trade Centre (ITC), based on the ITC benchmarking database for business support organizations.

Researchers: Elizabeth Martinez and Olha Krylova, ITC.

Annotated references: Olha Krylova.

Thanks are due to ITC colleagues who organized events in 2023 that shaped thinking around this report. These include sessions on digital and AI issues at the World Export Development Forum in Mongolia; in-house presentations and exchanges on AI led by ITC's Innovation Lab; and the SME Trade Academy's event on the impact of AI in training.

Special thanks also to ITC reviewers with expertise in AI in communications and the tech sector: Serge Adeagbo, Anne Chappaz, Olha Krylova, Martin Labbé, Sibylle Neuhaus, Alberto Amurgo Pacheco, Ann Penistan, Barbara Ramos, Greg Sampson, Marianne Schmitt, Zhaocan Li, and Muhammad Yakubu.



With gratitude to our external peer reviewers:

Peter Hulm, Deputy Editor of Global Geneva Insights, consults for international organizations on development issues. A longtime journalist with organizations such as Reuters, he tests AI products for their shortcomings as well as their appeal and monitors developments on his nusereal.com website.

Matthew Wilson, Ambassador of the Permanent Mission of Barbados to the United Nations Office and other International Organisations in Geneva, is also Chair of the World Trade Organization Informal Working Group on Micro, Small and Medium-Sized Enterprises.

Ana Laura Vega, Chief of Staff, PROCOMER, the trade investment and promotion agency of Costa Rica.

Editorial production: Natalie Domeisen and Anne Griffin (both ITC). Editing: Jennifer Freedman, senior communications consultant. Design and layout: Design Plus. Digital printing: Serge Adeagbo (ITC).

The views of the authors, Natalie Domeisen and Sarah McCue, are their own. Together with Olha Krylova, as they explored the topic, they realized how their professional experiences shape people's approaches to AI, including their own.

Natalie Domeisen heads publishing and event management at the International Trade Centre, the United Nations small business agency. She has worked in all aspects of publishing and communications over her long career in various United Nations organizations, the World Economic Forum and World Learning Inc., the experiential learning university that trains the US Peace Corps. AI-powered tools are part of her toolkit of solutions as she delivers multilingual publishing, printing, video and communications services.

Sarah McCue has served US government agencies, United Nations organizations and international non-governmental organizations focused on entrepreneurship, trade and technology. Also a serial entrepreneur, she launched a youth empowerment platform in collaboration with Cisco Foundation and Google; led the creation of WorldQuant University; and founded an online mentoring initiative funded by Elon Musk. She is an adjunct professor for Georgetown University's Information Technology Management programme.



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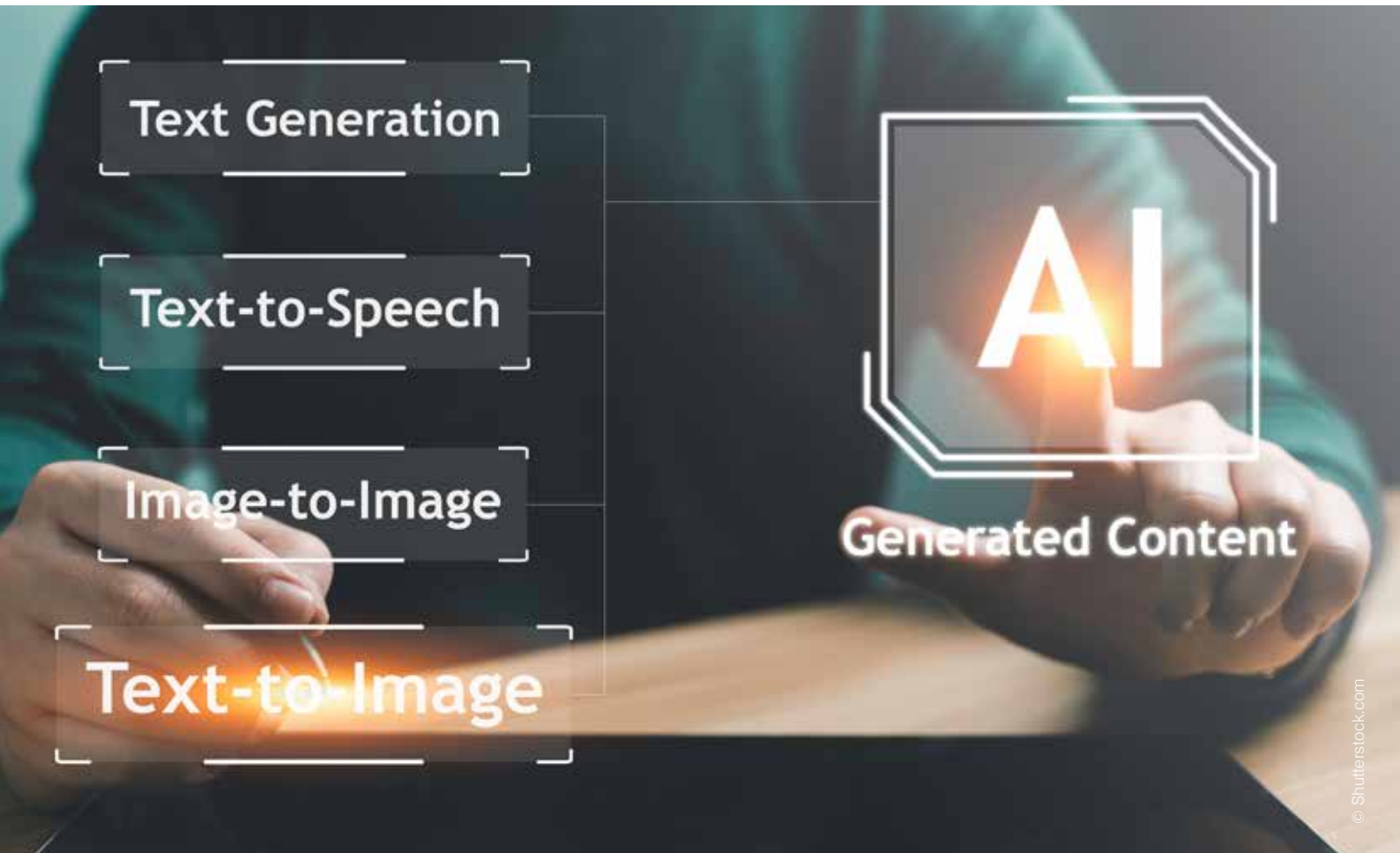
## Acronyms

Unless otherwise specified, all references to dollars (\$) are to United States dollars, and all references to tons are to metric tons.

AI	Artificial intelligence
BSO	Business support organization
CRM	Customer relationship management
GPT	Generative pre-trained transformer
IP	Intellectual Property
IT	Information technology
ITC	International Trade Centre
LLMs	Large language models
SMEs	Small and medium-sized enterprises
WIPO	World Intellectual Property Organization

## DEFINITIONS:

# AI in publishing



### Basics

**Artificial intelligence:** Simulation of human intelligence processes by machines.

**AI-generated content:** Text, image, video or other content forms created with AI technology.

**AI literacy:** Knowledge and skills to understand, use and manage AI effectively.

**Digital literacy:** The ability to find, evaluate and communicate information in various digital formats, and the skillset needed to live, learn and work in a society where communication and access to information is increasingly through digital technologies.

**Multimedia publishing:** Content creation and distribution in digital formats in online sites and platforms. It can combine text with text, audio, images, animation, videos and interactive content.

## AI text and data terms

---

**ChatGPT:** A generative text-based AI model developed by OpenAI that can simulate dialogue, answer questions and provide information.

**Generative AI:** An AI model that generates content in response to a prompt.

**Large language models:** AI models with a vast amount of text data that generate coherent, contextually relevant text based on prompts.

**Data visualization:** Graphic representation of information and data using visual elements such as charts, graphs and maps, with the help of AI.

**Prompt:** In the context of using ChatGPT or other large language models, a 'prompt' refers to the question provided by the user that guides the response of the generative text tool.

**Predictive analytics:** Uses machine learning to predict future events based on historical and real-time data, often used in forecasting and decision-making processes.

**Scraping:** Data is extract from websites, copied and then stored in a database. The phenomenon of gathering and copying this content for re-use is called scraping.

## Accuracy, bias, plagiarism and copyright terms

---

**Algorithm:** Rules used in calculations or problem-solving operations, especially by a computer.

**Bias in AI:** Systematic discrimination in AI outputs due to data that is incomplete or not properly representative of a set, or algorithms that reflect societal biases in data used to train a large language model.

**Content verification:** Confirmation of accuracy and authenticity, especially when AI tools are used.

**Deepfake:** AI-generated audio, video, photos or other forms of digital content that makes it appear that a particular event occurred, or that someone behaved in a way or said things that never happened. This effectively creates personas that never existed. Deepfakes are typically used maliciously or to spread false information.

**Intellectual property concerns:** Legal issues related to ownership and use of creative works produced by AI.

**Plagiarism detection in AI:** Tools to identify instances where AI-generated content may not be original.

## Organizational strategy terms

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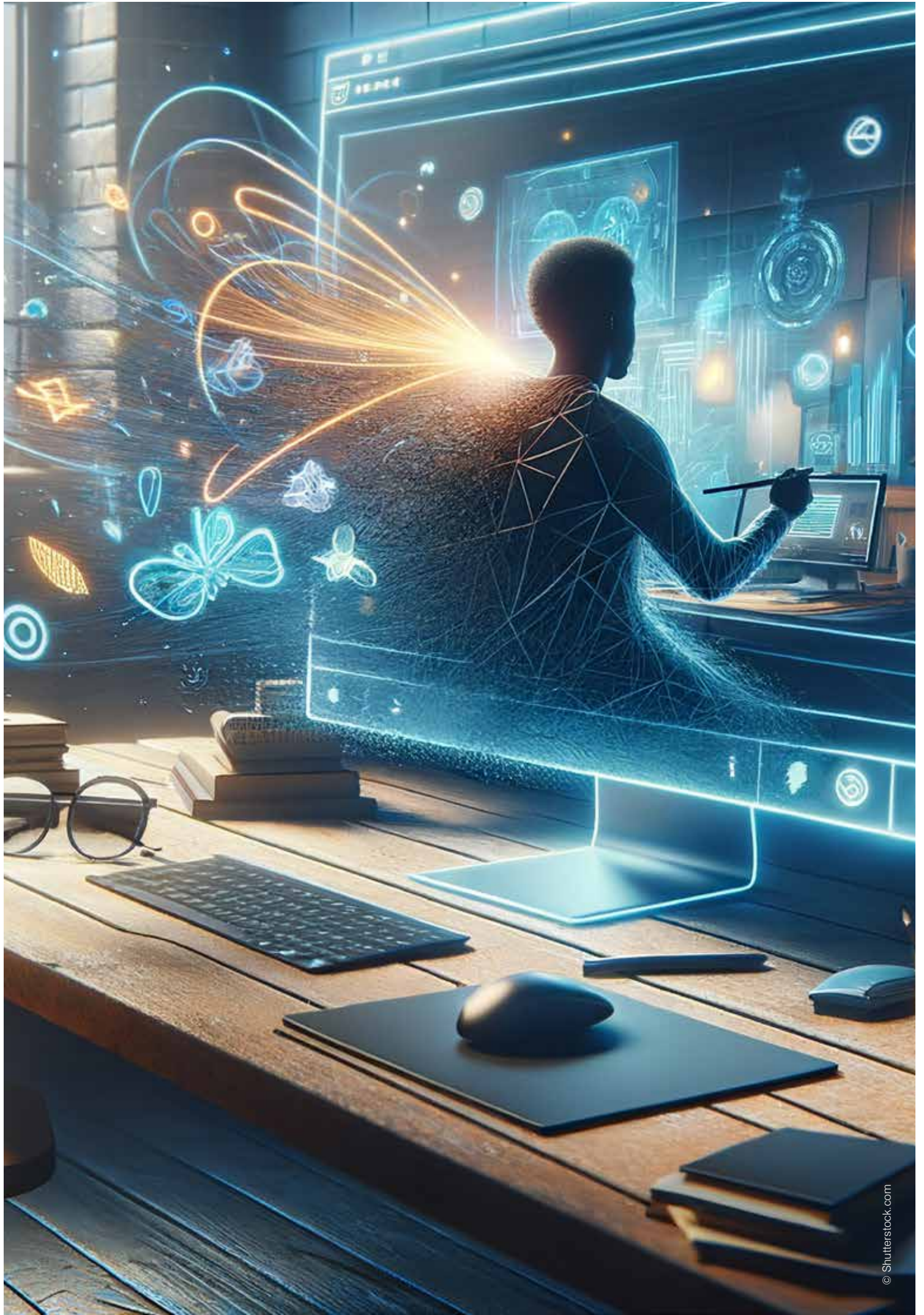
**Operational efficiency:** The ability to deliver cost-effective products and services without sacrificing quality, often enhanced by AI.

**Organizational strategy for AI:** A plan for adopting and integrating AI within the processes and operations of an organization.

**Ethical AI use:** Adhering to principles that govern use of AI to ensure it does not harm individuals or society and complies with safety and security. Other principles include fairness and non-discrimination, sustainability, right to privacy, data protection, data governance and a guarantee of human oversight over AI, as well as that AI does not impinge on people's freedom and autonomy.

See the appendices for a quick overview on how AI systems work, and tips to use these tools for research and writing.

*Sources: Authors. ChatGPT was used to suggest definitions based on this report's content. The authors then cross-checked definitions against sources such as Europol (deepfakes), OECD (artificial intelligence), Imperva (scraping techniques), McKinsey (GenAI), University of Florida (predictive analytics) and Salesforce (algorithms) and others, including ITC's strategy to use artificial intelligence in the workplace. Definitions were finalized independently.*





# EXECUTIVE SUMMARY

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## Executive summary

### Living with the 'uncorked' genie.

In the workplace, that is what we do with artificial intelligence. Artificial intelligence (AI) is the genie that can help us unleash innovation – yet triggers ethical concerns.

In the tale of *One Thousand and One Nights*, Aladdin rubs a lamp, releasing a powerful, magical genie. He grants Aladdin three wishes. These wishes have positive intentions. But the consequences can be positive or negative, in ways that one would not expect.

Today, letting the genie out of the bottle is a metaphor where this powerful force has been unleashed and cannot be bottled up again – AI in the workplace is akin to Aladdin's genie.

AI tools make us more powerful; their ability to automate tasks can save us time, enabling us to innovate, share and grow. Yet AI tools can also be harmful and dangerous when they are misused. It's up to us to make the most of our wishes to advance humanity, as we live with the genie.

What is the future for our work in using AI-embedded technology to analyse market information, identify trade opportunities and trends, conduct substantive research and improve writing and analysis? Our reports should continue to help small firms thrive in a global marketplace that is shifting due to climate change, conflict, technological change and other disruptions.

We wrote this report for leaders, managers, writers and communications specialists. The issues are relevant for trade and investment support institutions, chambers of commerce, business sector associations, youth accelerator programmes, government ministries, funders and similar institutions that support small businesses, with a focus on developing countries. These traditional ITC partners want to know how to make sense of all the fast movement forward in artificial intelligence.

## Practical tips for businesses and institutions

---

### This report includes:

- Top AI skills needed for small firms
- Publishing predictions to reshape your organization's business offer
- Tables summarizing AI-powered tools for research, writing, data visualization and marketing
- Checklist for organizations to implement AI tools
- AI trends in video production
- Case examples to inspire storytelling with dynamic statistics and videos

### Top takeaways:

- Fight misinformation and inaccuracy – with tools and human resources.
- Protect human creativity and diversity. Give creators credit and contracts. Go out of your way to consider bias, and counter bias.
- Embrace AI in the workplace with vision, training, tools and discussions.
- View AI as a partnership between the technology and the human using it.

## Publishing predictions

---

Publishing has evolved and lines are blurred between print and online publishing, reporting and advertising. A study of 48 countries<sup>1</sup> showed that we spend more than six hours a day browsing content online, as a global average. This contributes to shorter attention spans and greater competition for the minds and hearts of readers.

The role of humans vs machines raises concerns. Avatars are now beginning to present stories collected by seasoned wire service reporters, rather than reporters presenting stories supported by AI.

Changes in the publishing industry due to technology and AI have come hard and fast where fewer people are needed for some jobs; more people with different skills are needed for others.

Meanwhile, trade development organizations should consider these tips, based on current trends, when preparing content for trade policy, for businesses or for journalists:



- Invest in specialist audiences
- Address the decline of content quality
- Build trust as part of your brand
- Explore multimedia publishing and empower editorial specialists to add value
- Explore financial models to fund original research and content creation

We outline these trends in Chapter 1, *Untangling AI in your organization's reports*. A case study voice from the University of Washington exposes the bias in today's AI tools and encourages institutions to spur local technology applications that reflect the biodiversity of human knowledge and experience.

## Business support organizations advise caution

---

More than half of trade development professionals surveyed use operative AI tools for a wide range of tasks, improving efficiency, but with mixed trust levels due to concerns about accuracy and overreliance.

Despite benefits, there's a call for caution, better training and verification processes to ensure accuracy and ethical use of AI-generated content. Respondents are looking for guidance, including from the International Trade Centre. Chapter 2, *Business support organizations use AI tools*, shares survey results regarding their use of AI tools and shows how they use technology to help small firms meet buyers and understand market entry opportunities. It also outlines the top AI needs for SMEs.

## Small firms need AI guidance

---

Thought leadership in today's digital world is not easy, because critical thinking is at risk. Leaders and managers can encourage critical thinking with their staff and business clients by drawing on lessons from academia, which deals regularly with AI-driven content from students.

Trade development institutions should adjust their programmes for small firms. Research shows that small companies need advice to understand how to use AI tools such as ChatGPT to grow their businesses. Handy tables summarize AI-powered tools to support research, writing, peer review and references.

Chapter 3, *Content creation with AI tools*, offers advice in these areas.

## Everyone publishes: Coordinate strategy

---

Many people see AI-powered tools as a magic bullet to publish content quickly, without 'gatekeepers' to slow them down. Communications specialists often see a decline in content quality. Both information technology and communications experts can lose precious time supporting innovative colleagues who explore a wide range of tools, if policies and steps are not in place to help an organization stay in sync.

Three steps may help institutions. First, introduce a common suite of editorial tools. Next, explore storytelling through data visualization and videos. There are exciting applications for economists, trade experts and other professionals looking to reach business audiences. Finally, consider speech-to-text tools. They have many applications for research, writing and promotion.

Using these tools to shape a collective institutional brand requires leadership, dialogue, training and reskilling.

Chapter 4, *Is Everyone a Publisher?*, explores for coordinated organizational strategy in the face of diverse content creation. Three case studies follow: on the AI impact in business journalism, with a rise in automated content and data-driven stories, pen-wielding humans versus machines and dangers of misinformation and bias; on AI-powered trends in video from a video producer; and on AI-generated covers and trends in trade finance publishing.

## Consider developing country perspectives

---

Understanding both global and regional platforms can help sellers, buyers and business support institutions build market share. Consider regional and national platforms along with global ones.

Publishers in developing countries use global platforms for their distribution power. They remain concerned about not being heard by global publishing platforms.

In Chapter 5, *Reach Wider Audiences with AI Tools*, we outline these platforms, offer tips to use AI tools to promote reports online and advise on how to build successful marketing content.

## Manage and discuss risks

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Deepfakes erode business credibility and even undermine national brands. Plagiarism, bias and inaccuracy damage trust. The concluding Chapter 6, *Risks and Recommendations*, shows how challenges and opportunities go together.

### Writers: Automation brings freedom

As information providers: AI helps us all to be much more efficient because it automates the time-consuming tasks in our jobs. This means that many more people are writing and publishing.

With all automation processes, some professionals are going to lose jobs – including editors, researchers, translators and layout experts. Fewer of those focused on more creative and analytical work are likely to lose their jobs.

### Information comes at the cost of trust

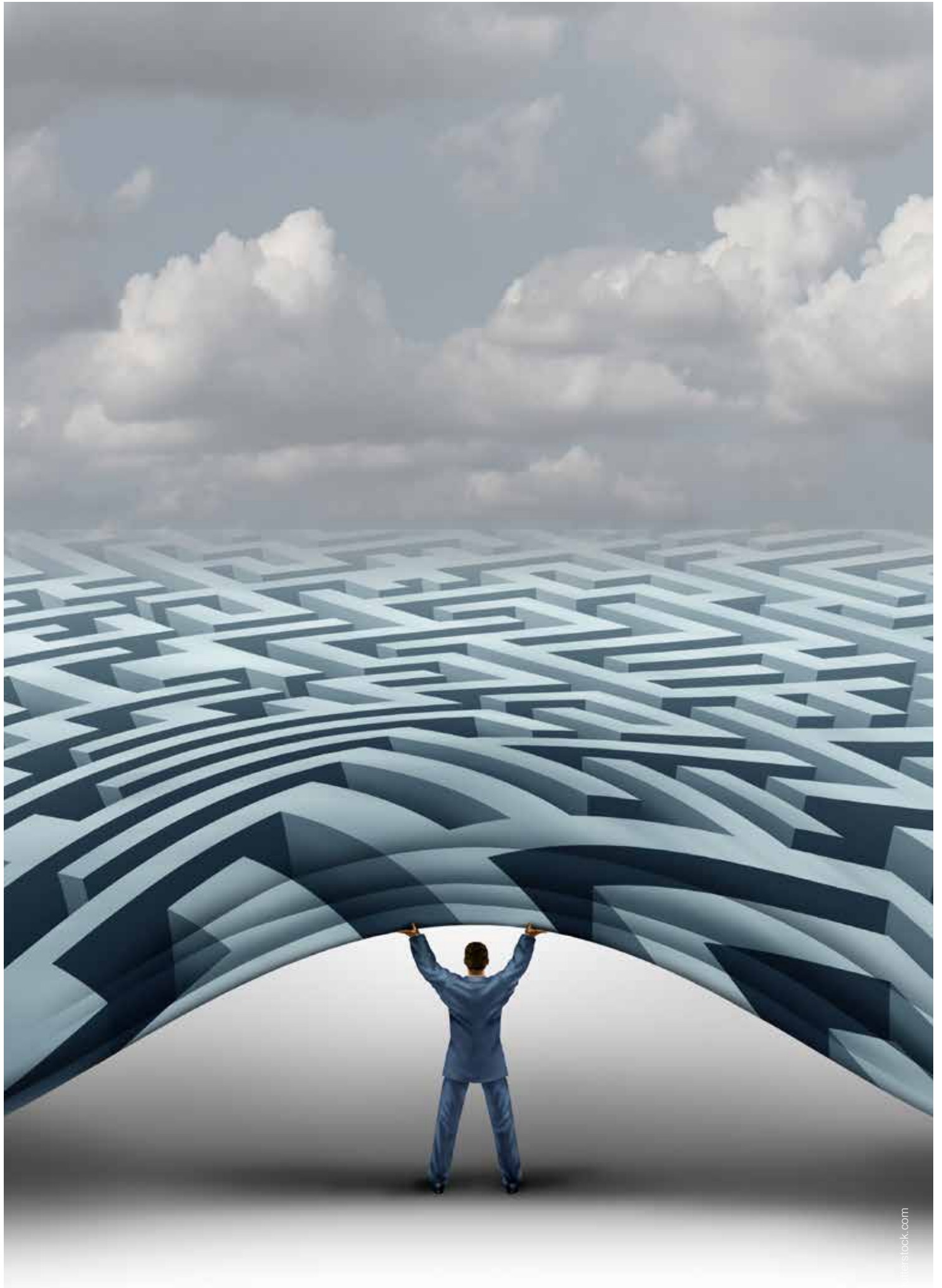
The cost for this endless fount of information is trust. Bias reinforces lack of diversity; lack of fact checking reduces accuracy and quality; plagiarism and intellectual property concerns are many; and deepfakes with AI-generated images confuse and scam viewers.

### Your audience: Is choice an illusion?

The internet has brought a vast amount of information online. Consumers can select and customize what they want to receive. Much content is free for users.

Their choices are inadvertently limited: by bias inherent in platforms and by declining quality as publishers, media houses and development organizations cut communications specialists.

As everyone can now be an author, business support organizations are encouraged to widely share and discuss the detailed recommendations in this report so an organization-wide plan can emerge on how to integrate AI-embedded tools. AI trends are rapidly evolving, and AI literacy in the workplace is paramount.





CHAPTER 1

# UNTANGLING AI IN YOUR ORGANIZATION'S REPORTS

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## CHAPTER 1

# UNTANGLING AI IN YOUR ORGANIZATION'S REPORTS

Go digital, be more efficient, be more competitive. How often we've heard this.

## Physical or virtual? No longer the question

If the simple mantra 'Go digital' guided the publishing world (and other worlds) in the past decades, the pandemic brought it mainstream. The word 'hybrid' took on a new meaning, combining virtual and physical presence as we talk trade, do business and drive development.

Yet communications – its past, present and future – is hybrid. In the 15<sup>th</sup> century, we used the church pulpit, the village square and the Gutenberg printing press to influence, advocate and train. In the 21<sup>st</sup> century, we combine printed works and gatherings (conferences, workshops and town hall meetings) with videos, websites, social media and even avatars to communicate. Physical and virtual mediums blend in ways we could not have imagined a few decades ago.

Consider how a medium we have used for centuries – publications – is being transformed before our eyes.

Around 1990, Nicholas Negroponte, head of the Massachusetts Institute of Technology Media Lab, made a prediction at the World Economic Forum in Davos that surprised many. One could start at the breakfast table with a newspaper, evolve with the same newspaper content in podcast format in the car on the way to work, perhaps move to a computer screen and later in the day sit down in front of a television screen. Technology would allow us to consume information seamlessly in different formats.<sup>2</sup>

In recent decades, we've seen an overlap in content, style and format of different publishing mediums. Television, radio, magazines, newsletters, newspapers, books – all deliver news, trends and analysis – and today borrow formats and content styles from each other. In 2024, books often contain specially designed case studies, interviews and thought leadership articles that once would have been more common in magazines. With the rise of online media, the lines have blurred still further. As social media gained popularity, driven by videos, photos and short texts, we have all become publishers.

## Blurred lines: Facts, opinion, advertising

The lines have blurred, too, between news reporting and news opinion, between advocacy and advertising.

Take, for example, newspapers hot off the printing press. One would see breaking news on the front page. Opinions were contained in an editorial op-ed section within the paper, with distinct layout, rules and style. Feature stories were in specific places. Sections dedicated to world news, business reporting, health, sports, movies and community projects were in defined sections. Advertising was clearly visible – separate inserts or, if in the body of the paper, marked by boxes.

Today, those newspapers are often read online. Breaking news may not be the first thing people see. Advertising appears differently. As less experienced publishers join the online news marketplace, the categories are merged, and the guidelines are fewer.

No wonder then, when one says 'publication', people have different pictures in mind. With fewer traditional gatekeepers to publishing, the rules have changed. Lately, it can mean anything from a vacationer's Instagram post or a conference interview on YouTube, to a business directory (such as the 'Yellow Pages'), a clothing catalogue, a company annual report, a collection of statistics or a major economic research report. All of them can appear in print, online or some combination along the spectrum.



## AI: Old story, new wave

Just as the pandemic made us realize that we needed to take another leap to bring our digital presence up to speed, OpenAI launched ChatGPT with significant investment from Microsoft. It inexpensively reached students, small business owners and busy professionals (especially young or technologically savvy ones) and writing evolved. Colleagues started to write correspondence elegantly in multiple languages. Proposal writers saved hours of time generating summaries of their work. Students quickly created short summaries of major tomes.

Large language models (LLMs) and writing, research and production tools embedded with artificial intelligence have streamlined the publishing process in several ways:

- **Content creation:** Generate ideas, create outlines and draft content.
- **Research:** Summarize research papers, source relevant citations and provide answers to research queries.
- **Editing and proofreading:** Detect grammatical errors, suggest stylistic improvements, rephrase sentences for clarity and readability.
- **Finding content online:** Generate ways for published content to be searchable, including automated data with keywords, summaries and tags.
- **Translation:** Translate content into multiple languages.
- **Marketing:** Create promotional material, write press releases, manage social media campaigns through the generation of posts and content.

By automating and enhancing the writing, editing and publishing process, LLMs help publishers and authors save time and resources, allowing them to focus on creative aspects of content creation, partnerships and outreach.

## What is the future for trade reports and guides?

Among trade development organizations, people who create reports, guides or directories – with research-based facts, analysis and recommendations – often don't consider hybrid and online readers. Rather, they use AI-powered tools to be more efficient, but culturally are 'bound' to traditions launched with the Gutenberg press.

As Ethan Mollick, Associate Professor of Management at the Wharton Business School of the University of Pennsylvania, tells us in his January 2024 newsletter on artificial intelligence in the workplace:<sup>3</sup>

*Social change is slower than technological change. We should not expect to see immediate global effects of AI in a major way, no matter how fast its adoption (and it is remarkably fast), yet we certainly will see it sooner than many people think ... real change often originates in smaller communities and pockets, among user innovators and those with extreme needs, or in the research being done in labs and universities.*

This is why report creators use AI tools for efficiency, yet still rely on words – more than infographics, videos or dynamic statistics – to tell a story. The sentences may run as long as four, five or more lines. The paragraphs may be lengthy and are not signposted with titles, subtitles and meaningful storylines.

We publish reports online that are PDFs of a printed report, with a recognizable, print-style book cover. The concept is the same – even if the pages flip or a video gets embedded in a foreword.

But these concepts are evolving, led by early adopters. Many international organizations now put multimedia summaries of their flagship reports on their web sites, as well as a full PDF of the print report. Media companies often include data visualization in their reports, and automate routine content production.

Forward-looking content producers are tapping into: deep analysis and human experiences for important societal issues, packaged with text, video, audio that helps them reach younger audiences, build trust and engage with viewers.

## SHOULD WE WRITE FOR 'POPCORN BRAIN'?

Content overload online has changed our ability to absorb information. Constant online stimulation and scrolling among multiple screens affect the brain's ability to focus and think deeply.

An October 2023 analysis of 57 global studies<sup>4</sup> on attention deficit hyperactivity disorder investigated why these diagnoses in adults are increasing exponentially. Online content is reshaping the brain. For many of us, information overload has reduced our ability to focus for any length of time. A term has even been invented for this decline in attention span: 'popcorn brain'.

Online attention spans – the time one can concentrate without becoming distracted – are decreasing to as low as 12 seconds. A study of 48 countries found that people spend an average of 6.41 hours a day browsing news websites and social media and reading e-mail and other online content.<sup>5</sup>

There are 21,600 seconds in six hours. If we switch content every few seconds, the amount of disaggregated content the human brain is consuming is staggering.

## Publishing trends

Take these trends into account as you shape your organization's future publishing programme.

### SPECIALIST AUDIENCES: ON THE RISE

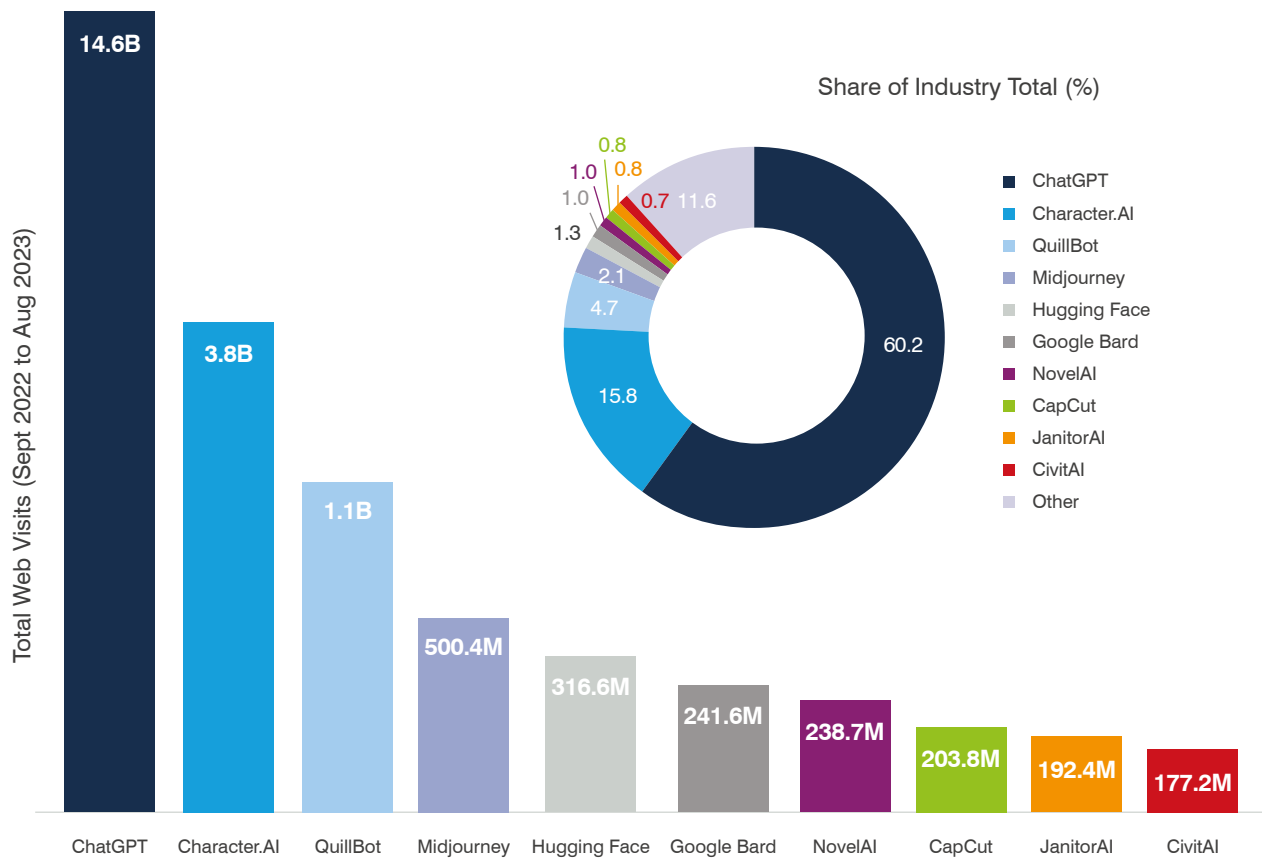
AI-based tech tools democratize publishing. AI makes publishing-by-all easier, leading to a surge in content creation. So many content creators are excited by the tools available and the opportunity to publish without going through traditional 'gatekeeper' channels. The same goes for company leaders and financial investors – they see easy tools to use to reach their own specific audiences, or they use them primarily for publicity.

As audiences face more and more content, publishers face competition. Organizations try to overcome that competition with niche marketing and strategic partnerships that capitalize on unique and diverse audiences of partners.

This trend is reflected in AI tools. Visual Capitalist ranks popular AI tools and notes that if 2023 was the year of general models such as ChatGPT (with 60% of user visits among text, video, image, data science and chatbot tools reviewed), then 2024 will see the release of tools for more specialized audiences.<sup>6</sup> These may focus on topics (an AI tool to check the accuracy of climate data statements) or audience types (students, video creators). Trade development experts will surely refine tools for data analysis and for outreach in specific sectors.

Many working professionals, faculty and students remain unaware of the risks associated with fragmented audiences.

- **Bias, factual errors and plagiarism are rising** as tech companies scrape the internet for content that it uses for its AI-powered tools. Corporate standard-setters and gatekeepers – such as those who edit and check corporate policy, terminology, messaging tone and style – are losing their jobs. The loss of experienced editorial specialists contributes to a loss in quality.
- **Readers have shorter attention spans**, as they quickly consume greater quantities of bite-sized content online.
- **Echo chambers are growing.** As people turn to the same sources in fragmented markets, they risk losing broader perspectives. This leads to lack of understanding and conflict within societies.
- **Organizations may lower standards.** Publishers, both public and private, face resource constraints and demands from funders for publicity-focused content. While quick, photo-and-tweet-style content has its place, its dominance comes at a cost, and needs to be underpinned by substantive content to retain trust in the brand. Investigative writing and human reporters, already on the decline, face further cuts. In the public sphere, cutbacks among seasoned communicators mean organizations lose experts in content curation, including research, original writing, messaging, content review and quality control. This affects the organization's ability to stand out in a fast-changing, crowded marketplace.

**Figure 1** AI tools in the workplace

Source: Adapted from Ranked: The Most Popular AI Tools, Visual Capitalist, 24 January 2024, <https://www.visualcapitalist.com/ranked-the-most-popular-ai-tools/>

## BUILD TRUST: SOLUTIONS-BASED PUBLISHING

Major topics, such as climate change, human rights and war crimes, need solutions-based reporting. Holding power accountable and uncovering the stories that bring behavioural change are the areas where excellent communicators can make a difference. Some journalists recommend this track for mainstream journalism,<sup>7</sup> which has long been a feature of publishing in international organizations. Trust is an issue. Publicity and advertising bleed into reporting to narrow audiences.

Audiences large and small will accept good analysis, backed by credible data. In these times of publishing doubt, building trust is part of a strong brand. Those organizations that master AI tools and keep the soft skills (journalistic-style reporting, for example) will find an audience.

In a context where AI tools trigger mistrust or reader fatigue, a back-to-basics approach is helpful.

## LOCAL LANGUAGE MARKETS: NICHE OPPORTUNITIES

Developing countries will find scope to develop new publishing services that take local preferences and customs and languages into account. Locally developed applications and products can counter misinformation. Western-dominated social media platforms and AI tools are not designed to take into account feedback from far-away markets.

This means that publications suited to local small business audiences have a market. The key is not just to translate publications, but to adapt them to local needs and contexts.

For those working locally, find partners across borders to adapt relevant content to other markets.

## INTERACTIVE, MULTIMEDIA PUBLISHING: A SLOW RISE

AI tools help people create multimedia content more quickly. The more senses are used in communications, the more audiences retain. Adding sound and moving images to text has had a major impact in publishing. Social media posts that use video and sound get much stronger audience engagement than those that do not.

Big media houses have invested in multimedia publishing for decades, bringing life to major stories with dynamic images, interactive maps, comment features and more. Independent micro-publishers use AI tools to bring video reporting to viewers.

Non-media bodies – such as international organizations, national government offices and non-governmental organizations – are slow adopters. For social media outreach, they master the tools. For traditional reports, directories, sales catalogues and more, they lag behind. Without realizing it, they are bound by societal conventions of traditional publishing, and need the soft skills to accompany the tools that make multimedia publishing easy.

## EDITORIAL SPECIALISTS: ADDING VALUE

Communications professionals who use AI-generated tools for efficiency and who focus on higher level writing and analysis are more successful in keeping work.

As workers use AI tools without the skills, knowledge and experience of specialists, communicators are losing ground. Professionals with easily automated skills (basic copy editing, layout and translation) are among the most at risk.

While this trend has been under way since the 1990s, the current jump in AI tools for publishing is accelerating a shakeup across various communications fields.

If dominant publishing companies and trade development organizations shift their reporting models to solutions-oriented feature stories, this will have a positive ripple effect across society – thus the need for organizations to focus on building skills that will allow the labour market to adjust.

Editorial specialists also have an evolving role: they are essential to review AI content in original languages and translations, fact-check online content and provide context.

Editorial specialists also have a key role in developing or contributing to AI guidelines in the workplace. Editors have a key role in spotting fake or inaccurate information. They will need to keep up on AI tools, their limitations and issues, that will evolve considerably over the next few years.

## FOLLOW THE MONEY

Who pays for content development and publishing? Those who pay have a say in what is communicated. To read the crystal ball of publishing predictions, we must follow the money. Those who direct what content is produced are not publishing or communications experts who are in touch with readers or viewers on a regular basis. Rather, they include organizational leaders and managers, international development funders and funders of major media covering trade, international business and politics.

Will funders support content creation that responds to distinct audience needs such as finance for young entrepreneurs, or specific climate mitigation measure for small businesses in global value chains? Or will they encourage echo-chamber newsletters that speak to the converted? In an era where trust is essential for a brand, examining these questions is important.

The issue is a great one of our times. Even those with a lifetime in these fields do not have the answers. Promoting dialogue matters. Worlds are farther apart than one can imagine between these groups that have a voice:

- Organizational leaders and financial backers
- Professional publishers and experienced journalists and institutional communicators
- Content matter experts – scientists, doctors, economists, engineers and others
- Educators and trainers
- Tech companies providing AI-powered publishing solutions



THOUGHT LEADER

## Katharina Reinecke

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## Bias in AI tools: Hidden culture shock

Katharina Reinecke is Associate Director of Research and Communication, Paul G. Allen School of Computer Science & Engineering, University of Washington, Seattle. She researches how people's interaction with digital technology varies depending on cultural, geographic or demographic background, and how technology can be biased against people who are unlike the small groups of people who created it.

**Her work has won multiple best paper awards at premier conferences. Her lab has developed systems that make technology more suitable for diverse user groups and that can help designers and developers anticipate unintended consequences of technology.**

We've recently witnessed the tremendous impact that digital technologies can have on transforming our lives. When OpenAI released ChatGPT at the end of 2022, it was rapidly adopted by people around the world as a new source of information and writing support tool.

It's not the first time AI has had an enormous effect on the publishing industry; other AI technology has been supporting publishing for many years by helping to sift through large amounts of information in search of the next story, fight mis- and disinformation, disseminate news or automate journalistic writing. There is no doubt AI has been transformational by helping to increase the pace and efficiency of publishing.

### Digital technology: Never neutral

But digital technology is never neutral, and AI is no exception. When we use these tools, we have to ask ourselves: Whose views are they representing? Whose values and norms are embedded in their design? And how are they culturally biased?

AI is trained on internet data; in the case of large language models such as ChatGPT, they learn from sources like Wikipedia, journals, news articles, and websites that are deemed high quality by their developers. Because Westerners have often provided the information on these websites, it is not representative of the viewpoints of people in other parts of the world.

In fact, in our research, we've repeatedly found the output of LLMs to be heavily biased towards the views of white, English-speaking, individualistic Western men. Neither its values nor its communication style are universally shared by people around the world. Despite this bias,

LLMs tend to convey any information with an astounding degree of certainty, regardless of frequent mistakes and an inability to point to its information sources.

What happens if AI imposes its values on those who may have mismatching viewpoints? Based on our research, people can experience feelings similar to culture shock as you may know it from interpersonal interactions. It results in a slight discomfort that can impact how much they trust the AI and how much they feel like the technology was designed for them.

In interpersonal interaction, people often overcome the feeling of culture shock by adapting to the different norms and behaviours of the new culture. Psychologists call this acculturation. We adjust to a new normal or merge the new cultural observations with our own. If we assume acculturation can happen in human–AI interaction, the AI may subtly lead people to acculturate, changing their values over time.

### Reinforcing power imbalances

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While all of this is still highly speculative, I think it is fair to say that AI is inherently biased towards Western views and does not represent the diversity of global viewpoints. So when we rely on AI for publishing, we may impose these Western values and norms on others. Researchers have sometimes called this a form of cultural imperialism or digital neocolonialism, which is to say that the use of AI technology as it is today built risks, continuing a history of power imbalances between the Global North and the Global South.

I would even go so far as to say that the use of AI could threaten cultural diversity. With that, we lose different perspectives, ways of being and ways of interacting with each other. When I asked ChatGPT about the potential issue of homogenization, it seemed to agree: ‘Homogenization might lead to the dominance of certain perspectives while marginalizing or erasing others.’

The solution is not to avoid using AI, but to put into place safeguards that detect and eliminate these biases and that can help to produce output that is adapted to the specific cultural values and norms of its audience and users. This is by no means going to be easy; one way to start is by not designing these tools and their output for people, but with people.

### Questions & Answers

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Natalie Domeisen and Katharina Reinecke continue to explore the topic of bias in this Q&A.

**Q.** Do you have evidence of the bias you mention?

**A.** This graph (figure 1) based on research for our recent ACL paper is an example. It shows hate speech related to natural language processing datasets (in this case, for the dynahate dataset that is used to automatically detect hate speech and toxicity). The alignment is highest with people from English-speaking countries and roughly half for other parts of the world.

**Q.** You’ve mentioned that bias is white, Western. Is it also predominantly male?

**A.** It depends. For some large language models, we have seen strong biases against females, such as in [mental health stigma in language models](#). We’ve also seen that LLMs express biases in gender equality, most of them aligning with more traditional views.

**Q.** What about the value of freedom, embedded in AI tools? When speaking at the ITC SME Trade Academy event in December 2023, you mentioned that the values of ‘freedom’ and ‘individualism’ are embedded in AI tools. Freedom is an important value.

But freedom to publish whatever, wherever and however can lead to ever-more fragmented audiences, quality issues, plagiarism and deepfakes. At the very least, freedom as a predominant cultural value reduces critical thinking, as we may choose to be exposed to fewer different perspectives. This is surprising, of course, because total lack of freedom reduces critical thinking and leads to quality issues as well.



**Natalie Domeisen**

*Head, ITC corporate events and publishing programmes*

**A.** Yes, these are great examples. Freedom aligns with the Western (or North American) idea that choice is always good. But there are also more tangible biases. Generative AI will often produce stories and images that are based on stereotypes and negative aspects. For example, if you ask an AI system to produce a story about today's life in Rwanda, it will likely include the genocide and perhaps talk about poverty.

**Q.** In your research, do you come across tools with different cultural values embedded in them from other countries? I visited Station F in Paris in 2018, a major business incubator for tech start-ups, and interviewed entrepreneurs. They had many innovative apps that support culture, which is something they value. Should we recommend to trade promotion organizations, youth entrepreneurship accelerators and other business support organizations to publish market studies that encourage tech sector development with different cultural perspectives?

**A.** I totally agree! In fact, I just finished writing a book on culture and technology (it will be published later this year). The key recommendation I make is that we need to diversify who builds digital technology. Many countries have started investing quite heavily in start-ups, but there's still a lot of Western influence. These investments are often made to achieve digital sovereignty, so more for economic and political reasons.

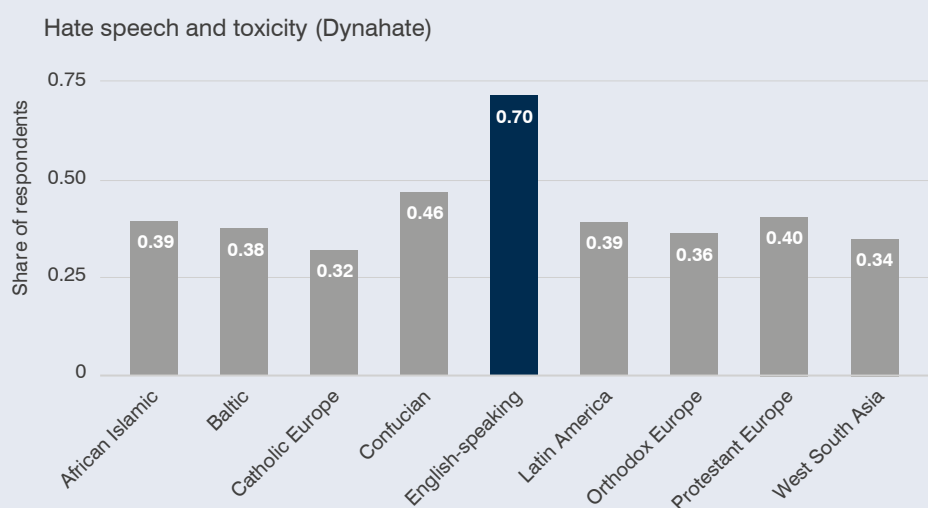
We have definitely seen tools with non-Western values embedded in them. For example, some MOOC providers in China and India take a different approach to how online lessons are designed. There are apps that cater to specific religions, such as ride-hailing apps that let people choose whether to ride with a same-gender driver or not.

One example I always found fascinating is [Naver.com](https://www.naver.com) in the Republic of Korea, which has long led the search engine market share in their country. It combines all sorts of other services, including a community Q&A feature. It's much more colourful than Google, of course, but it also caters to the Korean culture of trusting information more when it is provided by members of their in-group.

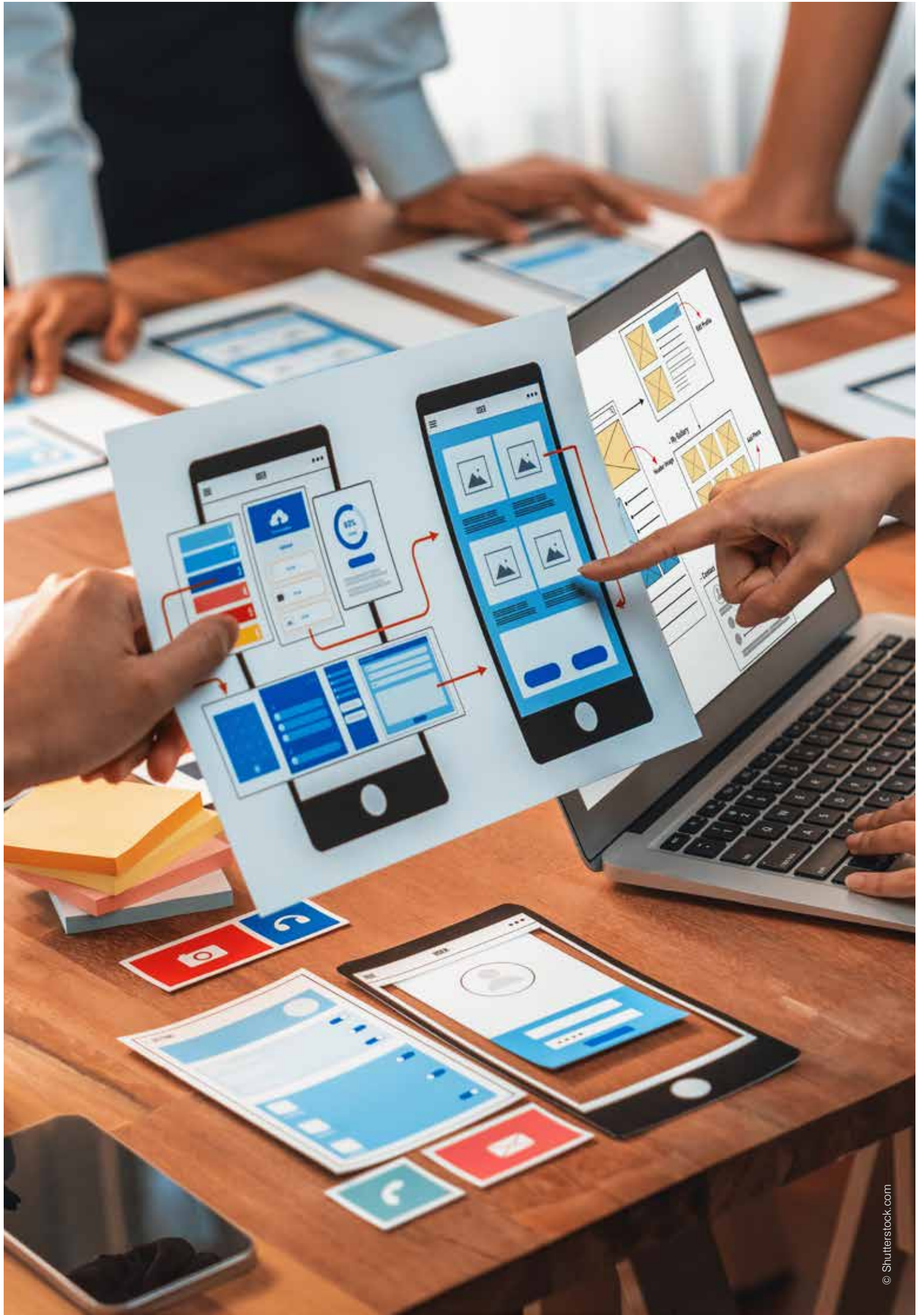
*'AI could threaten cultural diversity. With that, we lose different perspectives, ways of being and ways of interacting with each other.'*

*'One way to start is by not designing these tools and their output for people, but with people.'*

**Figure 2** Tracking hate speech



Source: K. Reinecke, adapted from: [NLPositionality: Characterizing Design Biases of Datasets and Models](#), Sebastian Santy, Jenny T. Liang, Ronan Le Bras, Katharina Reinecke, Maarten Sap - University of Washington - Carnegie Mellon University - Allen Institute for AI





## CHAPTER 2

# BUSINESS SUPPORT ORGANIZATIONS USE AI TOOLS

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## CHAPTER 2

# BUSINESS SUPPORT ORGANIZATIONS USE AI TOOLS

Do trade development professionals use artificial intelligence in the workplace? Do they use it in publishing? What are their concerns?

We surveyed the extent to which chambers of commerce, trade promotion organizations, youth employment incubators and accelerators are using artificial intelligence. The source was the ITC business support organization (BSO) benchmarking database, which has 800 trade development institutions.

The December 2023 survey netted a 9% response, with 73 institutions from nearly 40 developing and developed

economies. Respondents were predominantly male (77%) and most were between the ages of 35 and 50.

Of the 73 respondents, six were from developed countries. The developing countries displayed a real split, with 33 users and 34 non-users. For developed countries, five of six were users.

Developing country users cited the full gamut of content creation uses – research, writing, production and promotion. While the sample was small for developed countries, the uses were more restrained – for idea generation and summaries. (See Appendix II for details.)

**Table 1** Business support organization survey respondents, by country

Countries: 39							
Pakistan	11	Germany	2	Guatemala	1	Rwanda	1
Nigeria	8	Guinea	2	Iraq	1	Senegal	1
Islamic Rep. of Iran	4	Jordan	2	Lebanon	1	Sierra Leone	1
Algeria	3	Belgium	1	Lesotho	1	South Africa	1
Cameroon	3	Benin	1	Malawi	1	Switzerland	1
Costa Rica	3	Botswana	1	Morocco	1	Togo	1
Kenya	3	Dominica	1	Myanmar	1	Türkiye	1
Afghanistan	2	Egypt	1	Panama	1	Uganda	1
Eswatini	2	Gabon	1	Peru	1	United Kingdom	1
Gambia	2	Ghana	1	Poland	1		

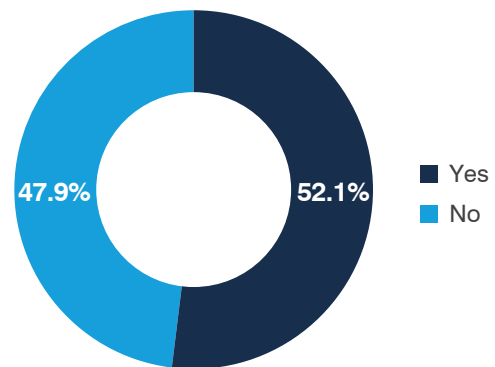
Source: ITC survey: Business support organizations' use of AI tools in publishing, December 2023.

## A majority use AI tools

More than 50% already use AI tools such as ChatGPT or similar AI tools in their work. Upwards of 60% rated their organizational experience with publishing and workplace use at three or better, on a scale of one to five (figure 3).

The respondents cited uses including code searching, presentations, translation, social media management, basic research, drafting and summarizing e-mails, and writing press releases and reports for efficient reading. More complex tasks were also reported. These include modelling of future trade trends given shocks or developments in world affairs, analysing financial documents, recommending best courses of action or developing business plans for clients.

**Figure 3** Do you use ChatGPT (or similar tools) in your daily work?



Source: ITC survey: Business support organizations' use of AI tools in publishing, December 2023.

## VIGILANCE, THEY SAY

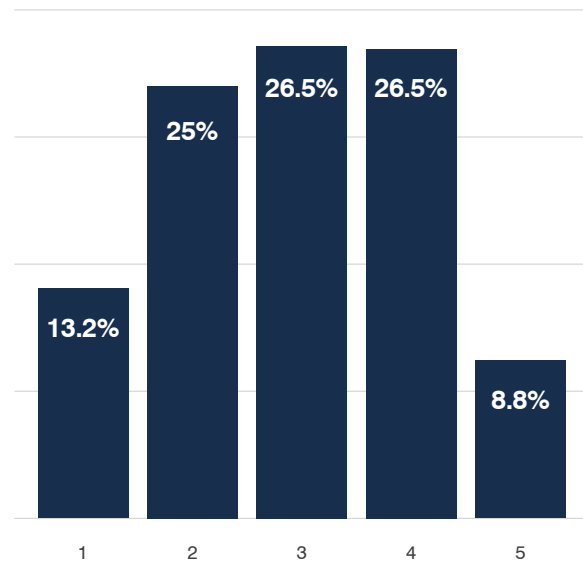
Survey respondents highlighted the benefits in using AI tools and urged a cautious yet explorative approach to mitigate inherent risks. Some appreciate their potential to revolutionize tasks, yet most had concerns regarding accuracy, plagiarism, spreading false information, intellectual property and over-dependency.

Opinions remain split, with more than 40% of respondents saying they don't trust these tools enough to use them professionally, due to shortcomings in accuracy.

While many use AI tools for reports or research, most understand the need to verify with further research or by consulting subject-matter experts. Suggestions included better training, verification of sources and caution in relying solely on AI-generated content. They also asked for information sharing on how other organizations use artificial intelligence tools, as well as more awareness training.

With more than half of respondents already using AI tools in their daily work, AI will continue to shape the way we work, research, write and publish in the world of business and trade.

**Figure 4** Rate your organization's experience with AI tools – particularly in publishing



Source: ITC survey: Business support organizations' use of AI tools in publishing, December 2023.

## Looking closer

We analysed the responses and categorized them to take a closer look at how they are using AI-powered tools in publishing and in the workplace. Their responses in full are captured in Appendix II. The most common areas are initial research, including summaries and idea generation; and editing, writing and translation. A few use it in programming, such as to generate forecasting scenarios.

### CURRENT USES

Their current uses can be summarized in the categories below.

**Creativity and brainstorming.** Brainstorm ideas. Idea generation for complex web searches.

**Knowledge enhancement.** Obtain hints on new topics. Get first overviews on complex questions. Enhance understanding and accuracy in specific topics.

**Information gathering.** Translate working documents. Research in various fields and for general research tasks with a structured framework. Gather world trade news and analysis. Summarize complex text and fine-tune results.

**Forecasting and predictive analytics.** Generate scenarios and simulations to predict outcomes. Model scenarios for problem-solving.

**Programming.** Search for code examples and usage in programming languages; provide tips on programming logic.

**Writing.** Make presentation notes and talks. Rephrase writing, summarize information. Write response letters, e-mails, reports, articles, social media posts and terms of reference. Proof and form better text structures. Generate reports and analysis. Write speeches, press releases and other letters.

**Outreach and marketing.** Use AI for communication, business planning and marketing strategies. Assist in composing articles, letters and posts. Generate social media copy.

### TRAINING REQUESTS

More comprehensive training, tutorials and trial periods are needed to assess AI tools, they said. Training needs span building awareness, using the tools and information sharing.



Specific training needs include: addressing challenges to formulate precise questions (prompts) to get relevant answers; understanding how AI can be used in publishing; how to conduct systematic checks on AI-generated publications; how to ensure that information and expert reviews are true, especially for authoritative organizations; and how to address limitations in relevance and getting content that is up to date.



## Top 10 AI skills in demand by SMEs

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Demand for new, diverse skills is growing rapidly as SMEs seek to leverage AI technologies to improve their efficiency and gain competitive advantages through smart application of AI. Based on development of post-graduate academic programmes and research for this report, below are 10 AI-related skills that can boost the competitiveness of SMEs in domestic and international markets.

### 1. Machine learning

Machine learning can automate and optimize operations, from inventory management to customer service. It can help SMEs identify new markets, making them more competitive against larger players.

### 2. Natural language processing

Natural language processing skills are crucial to develop applications that understand, interpret and generate human language, including chatbots, real-time translation, e-mail filtering, document automation and customer sentiment analysis tools.

### 3. Generative AI

Just as business support organizations are using generative AI tools, SMEs use AI to generate graphics for presentations, prepare and analyse financial reports, and draft business documents. SMEs need to understand where expert professionals add value in these areas and how to harness AI for efficiency, protect creative contributions and reign in dangers of misinformation or inaccuracy.

### 4. Data science and analytics

Being able to analyse and extract valuable insights from data is essential. This includes knowledge of statistical analysis, data mining and predictive analytics.

### 5. Software engineering for AI

Developing software that can accommodate AI technologies requires understanding algorithms, data structures, and architecture, as well as proficiency in AI-related programming languages such as Python, R and Java.

### 6. Cloud computing

Knowledge of cloud platforms that offer AI services and infrastructure, such as AWS, Azure and Google Cloud, is essential to deploy and scale AI solutions, and develop unique platforms and infrastructure that respond to developing country needs.

### 7. AI integration

SMEs can integrate AI tools to enhance operational efficiency. They can automate key business functions including customer service, human resource management and recruiting, sales, marketing, inventory control, financial monitoring and accounting, to generate significant cost savings and improved customer experiences.

### 8. AI strategy and implementation

SMEs need an AI strategy that aligns with business objectives. This includes identifying where to apply artificial intelligence in the organization, changing current job descriptions to incorporate AI, and searching for case studies on how SMEs are including AI in their business.

### 9. AI research and development

Countries and regions need to develop new algorithms, models and techniques that solve complex problems more efficiently. They can bring together investors, engineers, communicators and subject-matter experts to create their own AI-embedded tools and platforms. SMEs can develop products and services to meet these societal needs.

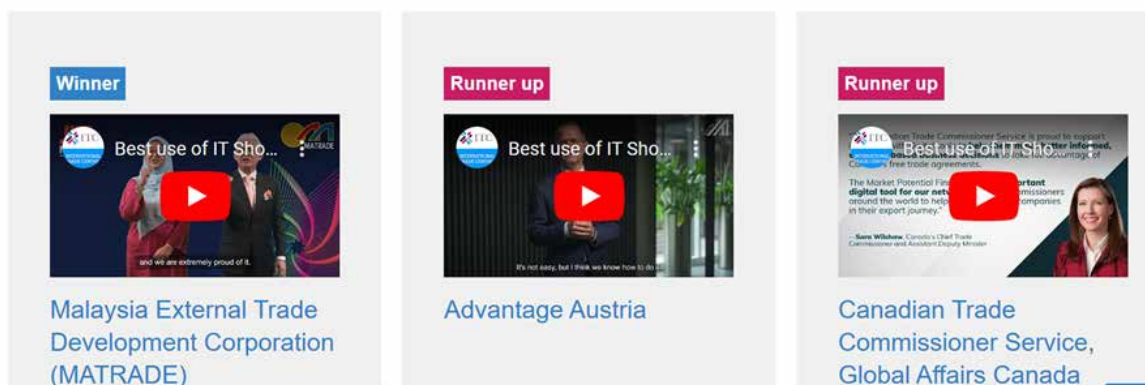
### 10. Ethical and legal implications of AI

Understanding the ethical considerations and legal implications of AI applications is increasingly important for SMEs, including issues of privacy, bias, fairness and accountability. Policy and regulatory frameworks should reflect these SME needs.

### Box 1: Trade promotion leaders in a digital era

National trade promotion organization leaders award prizes for excellence in trade promotion – from peers, to peers. For an insight into how they use AI-powered digital technology, see examples from the recent award winners for the IT initiatives. More video examples are online at the WTPO awards hub at <https://digital.intracen.org/wtpo-awards-hub/>.

#### Best use of information AI-powered digital technology



#### Malaysia – Malaysia External Trade Development Corporation (2022 winner)

**Initiative:** 17<sup>th</sup> Edition of the Malaysia International Halal Showcase – Virtual Edition

By digitizing the Malaysia International Halal Showcase in 2021, SME exports continued to grow in the halal industry despite Covid-19 disruptions. The virtual showcase opened up new markets and made business connections more convenient and cost-effective.

#### Austria – Advantage Austria

**Initiative:** Marketplace Austria for Food and Beverage 2020/2021

When COVID travel restrictions nearly stopped the flow of SME exports, Advantage Austria combined virtual business meetings with face-to-face tastings by expanding its B2B platform and using its international office network. They connected 150 food producers with 250 buyers in 38 countries, while reducing costs, staff time and the environmental footprint for business matchmaking.

#### Canada – Canadian Trade Commissioner Service, Global Affairs Canada

**Initiative:** Market Potential Finder

Canada's Trade Commissioner Service recognized that its small firms were not taking advantage of new trade agreements. The service trained 800 trade commissioners on free trade agreement benefits, so they could match firms with new markets. Post-training surveys showed that 87% of the trained commissioners used the results with clients.

#### Enterprise Georgia (2020 winner)

**Initiative:** Online training on export basics

Remote Georgian companies get previously inaccessible quality training about export readiness and market diversification. Educational institutions use it and the Bank of Georgia added the training to its own platform, extending free access to millions of bank customers.

#### China Council for the Promotion of International Trade

**Initiative:** Trusted Traders Online Platform

Based on visits to SMEs and a questionnaire to nearly 7,500 SMEs, the platform provides standardized credit assessment to companies, and has a database with over 300,000 exporters and importers, in Chinese and English.







## CHAPTER 3

# CONTENT CREATION WITH AI TOOLS

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## CHAPTER 3

# CONTENT CREATION WITH AI TOOLS

### Thought leadership in an AI world

With the pervasive influence of AI tools, university business professors find themselves in the forefront of reconsidering how to train the leaders of tomorrow. Future entrepreneurs, trade ministers, big business managers, heads of trade promotion bodies and chambers of commerce – they are among the ranks of university students today.

A decline in critical thinking skills, lack of fact-checking and the inability to understand broad perspectives and distinguish fake from real are dangers. These dangers are already finding their way into the world of trade development.

Compliance concerns is where they begin. Universities have plagiarism detectors and policies regarding plagiarized content. Forward-looking professors discuss AI in the classroom: 'Don't cut/paste because AI detectors will catch and embarrass you. Use AI to your advantage to become more efficient and concise in your research and writing.'

A few professors are already methodically rethinking each assignment for each class with the mindset, 'How can I force them to THINK and not rely on AI tools such as ChatGPT to write the content for them?' with non-writing assignments.

**Figure 5** [AI helps small businesses navigate value chains](#)



AI tools can help small firms understand prices for sourcing inputs or selling goods in global supply chains, says Professor De Kai of the Hong Kong University of Science and Technology. De Kai, a pioneer in machine learning (ML) research that contributed to the development of Google Translate, notes that even large companies have a lot of work to understand supply chains.

He also signals the need for caution. AI algorithms shape our online experiences as they curate content on Google, YouTube, Amazon, Twitter and TikTok. The current approach is driven by profit motives and narrows our exposure to information aligned with our preferences. This drives commerce, but also fosters polarization as it limits exposure to diverse perspectives and prevents a comprehensive understanding of different points of view.

Source: [Trade Trends for Small Businesses](#), multimedia report of the World Export Development Forum 2023. His interview is [here](#).

One way to counter the decline in critical thinking that can be a byproduct of these tools is to have students write less – have them verbally summarize their interviews with experts, create video presentations to improve their non-writing skills and collaborate with their classmates to produce final reports using multimedia tools available to them.

Organizational leaders can inspire themselves from these reflections to develop their organization's thought leadership with training on how to develop strategic thinking to scale up solutions for common business needs, to build critical public-private sector alliances and to improve communication of innovative ideas in public speaking and video presentations.

## 'Smart' research

AI has made the research process faster, in trade development as in other fields. Organizations can use AI-powered tools to research and guide SMEs, advise on trade policy and anticipate future challenges with AI tools.

How the tools are used, of course, matters as much as the tools selected for use. Asking the right questions makes all the difference.

Business support organizations should use AI tools with care when developing guides or advice for business performance of small firms, as this example shows.<sup>8</sup> Professors from Harvard Business School and the University of California at Berkeley studied 640 Kenyan small business entrepreneurs for five months in 2023, to assess whether AI-generated advice helped or harmed the firm. Using WhatsApp to answer business queries, some were assigned answers that came from a business guide and others received advice from an AI business mentor powered by ChatGPT-4.

The researchers carried out the study in to test whether low-cost AI assistance could be scalable as a way to improve firm decision-making and economic performance -- a question of relevance for firms, business support organizations and policymakers.

Existing studies had shown these researchers that AI helps writing performance for small firms in specific cases. But the researchers could not build upon those findings to conclude that low-cost AI applications distributed widely to SMEs would make a considerable difference in business performance.

Rather, the difference in successful AI use related to the baseline business performance of the entrepreneur. Researchers noted that the high business performers benefited by just over 15% from AI advice; low performers did nearly 10% worse.

They checked WhatsApp interaction logs and found that low performers asked more challenging questions to the AI tool. Furthermore, if they applied the AI recommendations that they received in their particular business context, the advice did not always bring good results for them.

They concluded that for high performers, AI could be used to scale up personalized mentorship and training at relatively low cost - but to beware of considering AI as a training panacea, because the results were uneven.

Our own conclusions are that business support organizations can use AI strategically to offer guidance to small firms.

### OFFER GUIDANCE FOR SMALL FIRMS



**Baseline performance.** Microenterprises and SMEs often do not understand their own strengths and weaknesses. They may not know how to use a large language model to answer their questions or submit their prompts. BSOs can help them assess what they truly need to expand their companies.

**Prompts for small firms.** BSOs can help small businesses identify where AI could provide the most value in decision-making, employee management, strategic planning, customer relationship management (CRM) or other key areas. Consider developing a prompt cheat sheet for small firms with specific prompts for all areas of start-up, growth and export expansion. A blind foray into ChatGPT will focus on overarching needs, but nothing specific to truly help them – for example 'Someone told me I need a business plan. Write a business plan for food processing.'

**Strategic integration of AI.** Small firms should strategically integrate AI into their business activities – beyond writing tasks, AI tools can enhance critical areas of the company. BSOs have in-depth understanding of the detailed needs of their firms and can help prompt them to use LLMs. A simple categorization of exporter needs along with prompt questions can be helpful.

In other words, BSOs can do 'smart' research in the true sense of the term – intelligent, digital and practical. They can strategically leverage AI assistance by understanding the baseline performance of small firms and identifying their needs.

**Table 2** Research: AI-powered tools

Task	Where AI tools add value	Examples
ANALYSE STATISTICAL DATA	AI offers faster processing of large datasets by automating repetitive tasks, identifying patterns and trends, and enhancing accuracy of data analysis for more efficient and insightful research outcomes.	Python libraries such as TensorFlow and scikit-learn, R for statistical computing, and specialized platforms like IBM Watson and Google AI
TRADE-SPECIFIC DATABASES	ITC has used AI to support its analysis for national export strategy, trade policy and non-tariff measures, as well as its sustainability standards research.	AI is integrated in publicly accessible trade-specific databases such as the World Trade Organization's Global Trade Data Portal; Datatrade Global Trade Data; United Nations Comtrade Database; and OECD Statistics
ANALYSE DATA FOR TREND ANALYSIS	AI tools for data summarization, review of data sets, data analysis, quantitative analysis and predictive analytics to uncover patterns and trends are at the forefront of the AI revolution in data analytics, offering capabilities that range from enhanced visualization to predictive modelling. They help businesses analyse data more efficiently and effectively, uncovering important patterns that inform better decision-making.	Tableau, Microsoft Power BI, IBM Watson Studio, Google Cloud AutoML, RapidMiner, Alteryx, KNIME (open source) and ChatGPT
PREDICTIVE ANALYTICS, APPLIED TO TRADE	Predictive analytics are the next frontier, allowing trade development professionals to better understand trends and options in international business and trade development – for example by adapting or partnering with the financial sector. Trade databases include statistics from national governments that rely on data which are authenticated, but not always timely. In times where conflict, climate-related disruptions and other emergencies may rapidly shift supply chains, etc., these data from these sources can be used with predictive analytics. Financial service providers such as hedge fund companies are using these statistics successfully, and their experiences could be applied more frequently to trade development.	SAS Advanced Analytics, IBM SPSS Modeler, Python, R, and Microsoft Azure Machine Learning
VISUALIZE DATA	AI-powered tools transform raw data into visualized data by creating interactive dashboards, charts and models. These tools bring data to life, offer insights and create advanced visualizations. As the field continues to evolve, these tools are expected to incorporate even more sophisticated AI and machine learning integrations, providing predictive analytics and automated insights to aid in data-driven storytelling and analysis.	Tableau, SAS Visual Analytics, QlikView, Microsoft PowerBI, and Google Charts (free), Datawrapper
SPEED UP FOOTNOTES AND BIBLIOGRAPHIES COLLABORATE ON LITERATURE REVIEWS	Reference management software tools organize citations, spot gaps and speed compilation.  They also make it easier for users to share references and collaborate on literature reviews.	Atypon, Zotero, Endnote, Mendeley

Task	Where AI tools add value	Examples
SUMMARIZE AND SYNTHESIZE RESEARCH	Researchers use LLMs to find and summarize relevant papers, synthesize answers to research questions and organize citations. Some helpful prompts for researchers include: What is the industry consensus around a given topic? What angles are being covered, where are there gaps and how would research make a unique contribution?	Elicit, Consensus, Semantic Scholar, Research Rabbit, Connected Papers, Scite, Scholarcy, ChatGPT, Bard
VERIFY SOURCES AS CREDIBLE	It is imperative to verify the credibility of all sources cited – the author, the publication, references and citations – and check for bias and objectivity.	See ‘Ways to verify sources’ in the Appendix VI for more information
CONDUCT SURVEYS	Many AI survey tools support multilingual surveys, manage and summarize reports, analyse data and highlight trends, and integrate with most CRM tools. These tools are equipped with AI features such as natural language processing for analysing open-ended responses, predictive analytics, intelligent survey design suggestions and efficient data analysis.	Survey Sparrow, Qualtrics, Survey Monkey, Typeform, Taskade
TRANSCRIPTION	Speech-to-text processing transcription tools are vital – and growing in importance. Experts who present technical content at conferences and meetings are an excellent source to publish current and unique content from national or regional areas. Video and audio recordings from meetings and conferences can be transcribed and edited using AI-generated speech-to-text tools that support multiple languages, dialects and real-time streaming.	Amazon Transcribe, Otter.ai, Descript, Sonix
RESEARCH CONCEPTS USING LARGE LANGUAGE MODELS	<p>A large language model is a type of AI algorithm that uses deep learning techniques and massively large data sets to understand, summarize, generate and predict new content. With 180 million global users of OpenAI’s ChatGPT of as early 2024, it is reasonable to expect that writers are using this and other LLMs to help them with research and writing.</p> <p>To generate ideas for content, it is important to construct a chain prompt that begins with a clear and concise initial statement or question, then follow it up with a related or evolving prompt that builds on the previous information, progressively guiding the response flow. See the ChatGPT prompting cheat sheet in Appendix IV.</p>	ChatGPT and other LLMs include Microsoft 365 Copilot and Bard, and Google’s Gemini.

Source: Author insights, supplemented by key references for this report, summarized via ChatGPT.

## Writing tools address many facets

AI writing tools can enhance the writing process and save time by suggesting grammar corrections and style improvements, generate ideas and titles, expand on initial concepts and summarize long text and articles.

Subject-matter experts and editors bring critical thinking, contextual understanding and domain expertise that AI may lack. Integrating AI into peer review can enhance efficiency, but it is most effective when working in tandem with human judgement and expertise. While AI can significantly streamline the peer review process, it is essential to maintain a balance with human oversight.

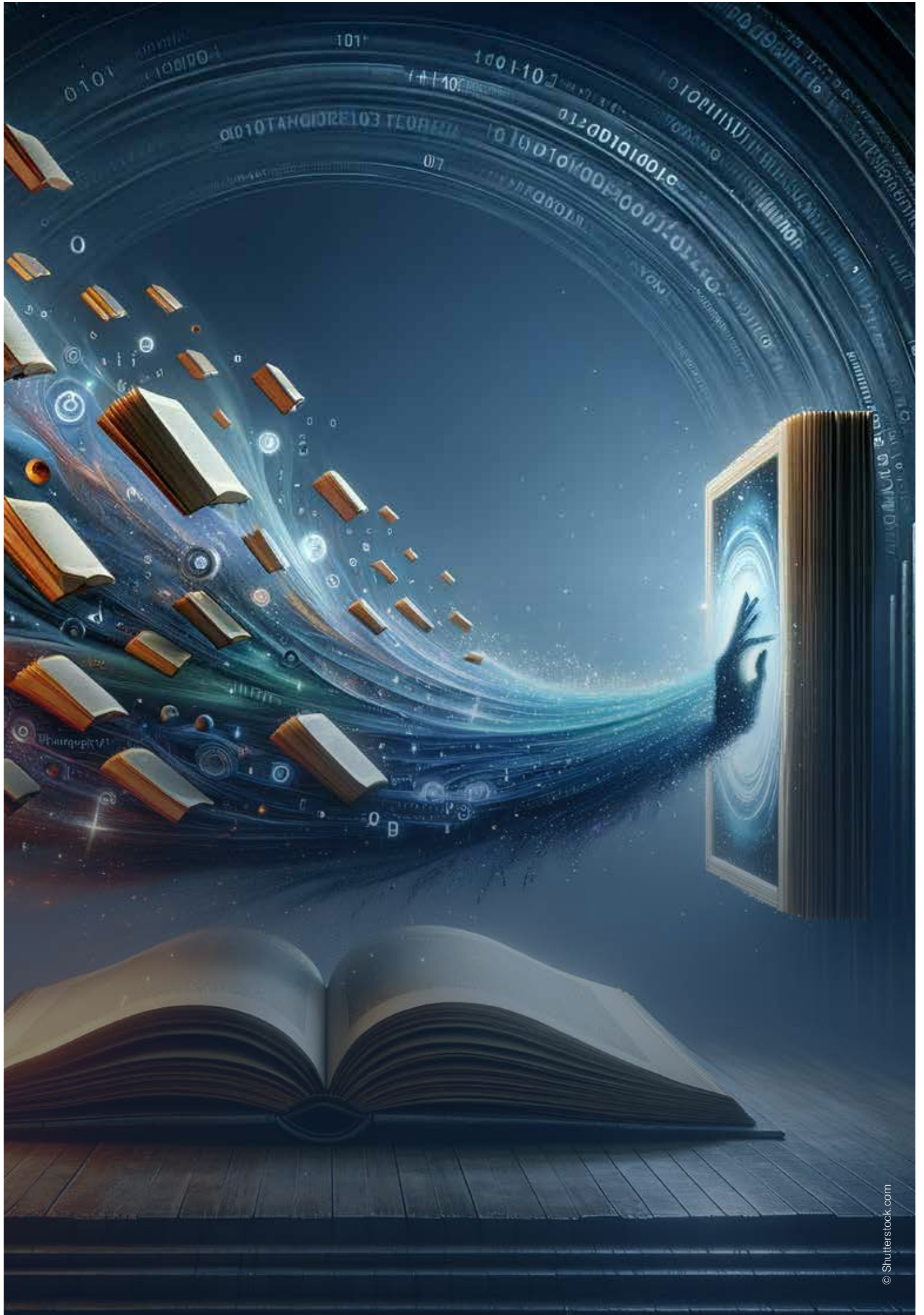
**Table 3** Writing: AI-powered tools

Task	Where AI tools add value	Examples
EDITING	Overall quality, tone and conciseness of writing. AI editing tools can bring efficiency and accuracy to the editing process including grammar and spelling corrections, style and tone guidance, plagiarism detection, readability improvements, content enhancement, summarization and analysis of long documents, and sentiment analysis to ensure a consistent tone.	Grammarly, ChatGPT, Trinka, Pro Writing Aid, Hemingway Editor, Shortly AI, QuillBot, Copysmith, Wordtune
PEER REVIEW	Before human reviewers delve deeper into the text, the writer should confirm the content was screened for: <ul style="list-style-type: none"> <li>▪ Plagiarism</li> <li>▪ Content analysis</li> <li>▪ Readability</li> <li>▪ Accuracy of references</li> <li>▪ Accuracy of statistical analyses</li> <li>▪ Contradictory statements</li> </ul>	ScholarOne Manuscripts, Editorial Manager, F1000 Research, Mendeley Suggest
CREATE VISUAL SUMMARIES OF WRITTEN CONTENT	AI-powered tools can almost instantly transform text into charts, graphs, bullet point summaries, infographics, mind maps, flowcharts, Frequently Asked Questions, presentations, training material, videos and even daily social media posts.	ChatGPT, Visme, Canva, Lumen5, WordsEye, Zoho Notebook, and Summarize Bot
PREPARE BIBLIOGRAPHY, REFERENCES	Tools for creating bibliographies can save time in formatting, organizing and summarizing references. The most efficient way to prepare a bibliography is by using a reliable citation management tool to keep track of all sources consulted during the research process, including books, articles and websites.	Taskade, EasyBib, Cite This For Me, RefWorks, EndNote and Zotero (open source), Atypon

Source: Author insights, supplemented by key references for this report, summarized via ChatGPT.

**PUBLISH**







## CHAPTER 4

# IS EVERYONE A PUBLISHER?

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## CHAPTER 4

## IS EVERYONE A PUBLISHER?

Most publishing and communications experts would say 'no' while others in an organization or a company would say 'of course!'

No matter how one answers this question, digital publication tools are embedded with AI help for publishing experts, authors, administrative staff and other writers.

We recommend new institutional approaches in offering guidance and flexibility to individual authors while maintaining institutional consistency in style, voice and quality.

## Organizations: Staying in sync

Micro-entrepreneurs, consultants, artists, students and even company staff who are not in formal publishing roles: these are among the individuals who will find the AI-powered tools mentioned in this report to be helpful. This publication notes that tools can automate some tasks to research, write, produce and promote reports. It outlines opportunities to tailor publishing content for small businesses in developing countries. This report also examines AI risks to cultural diversity and the impact on publishing.

AI tools can create anything in visual and written forms, but what's most important is how we tell the true, accurate, evidence-based story and engage to create the greatest impact. AI cannot build strategic relationships, identify best practices to adopt elsewhere or quickly scale what is working to achieve far wider impact.

To be visible, organizations must communicate as one: visually, in words and in concepts. Branding matters in competitive marketplaces; corporate positioning and messaging have a direct link to institutional funding and to pushing for behavioural changes in policy and practice that make trade grow.

Corporate priorities often target technology for the mass users. For example, management may decide that their information technology (IT) departments should focus on software, technical support and training on Microsoft services that address common needs for employees working with non-Apple devices.

In parallel, they need to look at early adopters and reconsider policies to handle the many apps that simplify publishing, and update skill sets accordingly.

Managing a wide range of tools is challenging for specialists who serve organizations. They may find themselves answering questions from employees who expect corporate budgets to pay for any new AI-powered app that can help them research and produce content. They may have to answer queries for a wide range of tools that they do not recommend, or master.

Meanwhile, corporate communicators end up backstopping content creation enabled by a proliferation of new products that do not follow agreed institutional standards for branding, terminology or messaging. In some cases, the reputational damage to institutions or individuals is minor, but other times it is not. What is most likely, however, is a watering down of the institution's brand if these issues are not balanced.

Overstretched communications and IT specialists find themselves dealing with fragmented tech requests that reduce their organizational impact. This has been a challenge for the last few decades and is set to grow with this new wave of AI-powered tools. Set against the trend to reduce jobs for communications specialists, organizations risk inefficiency and their reputation.


Leadership commitment, clear management roles, collective licences, training and skilling staff and regular discussions among different parts of an organization can make a difference. Beware of managing digital change by committee; it doesn't go far enough in rolling out and sustaining change.



## Edit with AI tools as one

Artificial intelligence tools can help organizations communicate and publish as one. Acquiring a tool is not enough; a rollout plan and training are critical to organizational change.

Many publishing departments (as well as major media outlets and publishing houses) have customized tools to check language for style, translation terminology, format and length. But many organizations do not have these tools for the average employee.



With the leap in power, inexpensive tools are worth considering for wide organizational use. Many organizations already have Microsoft Office, which detects spelling errors, awkward or grammatically incorrect phrases, and wordiness. But one can use editing tools that incorporate terminology specific to the organization – frequently used spellings, key organizational names, official country names and sector-specific terminology.

Publishing managers can save editors months of time by using editorial tools which incorporate organization-specific terminology. Publishers can then focus on a higher level of value – accuracy, style and strategic recommendations. They also have more time to develop captivating messaging for online readers that stands out from the noise.


This can go much further, of course, because common editorial tools will help staff prepare proposals, newsletters, letters and other communications that help an organization's collective image and impact.

Many company leaders in the United States (where AI tools have the greatest cultural traction) do not fully embrace the AI trend. According to Wharton's Ethan Mollick, 'Most companies have either ignored AI (though their employees use it all the time) or treat it as a standard knowledge management tool, a task that LLMs are actually not good at. This failure of imagination will likely continue – and continue to hurt companies.'<sup>9</sup>

This, of course, is not to say that these tools are the answer to all.

### ROLLOUT: AN EXAMPLE


For organizations looking to take a first step, Grammarly is an example of an inexpensive tool that has augmented its capacity thanks to AI. It checks and cleans spelling, grammar and punctuation, similar to Microsoft Word. It goes further, though, as it suggests revisions for clarity in English text and detects plagiarism. Grammarly can also incorporate an organization's style guide – commonly used terminology, spelling and phrases.



Organizations need a tech-savvy staff person or consultant to incorporate a style guide into the tool. Then buy a small collection of licences for staff who could be trained to use it for their own work, or theirs and a small group of colleagues, and then give feedback. From there, organizations can decide if they have the funds and systems to make such tools available to all staff.

Authors using AI tools need to check text revisions, just as they would check text revisions from human editors. Integrating such tools could save thousands of dollars.

What's more, basic texts that go to peer reviewers or supervisors are much easier to read. Editors could work at a higher level on structure, messaging and fact-checking, rather than correcting basics such as organizational names, overuse of acronyms, double spaces between sentences or other simple errors that are easy to programme out of writing.



For publishing managers who assess articles, case studies and book chapters, these tools save time. When assigning editing to their staff, an external consulting network or even planning one's own time, they can 'move up the value chain'. If staff can incorporate basic copy editing for their documents in a consistent way, it saves valuable time and allows editors to work at a higher level – they have more space to comment or work directly on structure, clarity and tone.

### Box 2: AI-powered text tools: An organization's checklist

- Leadership and buy-in from senior managers, who provide the vision, policies and resources to rollout new tools.
- A designated project manager with editorial and project management expertise, who can provide quality control, oversight, coordination and reporting.
- Guidance from in-house editorial experts, to incorporate an organizational style guide, test it and conduct an annual update. Organizational strategies and trade development and business trends evolve over time.
- A technician (or an editorial expert with these skills) to put the style guide into the software.
- A trainer of administrative assistants and/or authors who test the tool or use it on behalf of colleagues.
- Acquisition of licences for staff. Depending on resources, this could be an organizational licence for all staff, a single licence for a publishing copy editor or a series of licences for early adopters across an organization.

Source: Authors.

## Storytelling with data visualization

AI is exceptional for its ability to create compelling visualizations of data and highlight trends. We need to be able to use this data to tell the story – from our own perspectives and experience, and in our own voice. A great example is how Hans Rosling used international development data to show trends and deficits in our human progress in a highly viewed, highly visual, emotionally compelling and visceral way.<sup>10</sup>

Storytelling through data visualization brings report publishing and social media news to life. Economists, statisticians and communications professionals can benefit from AI-powered tools that combine text, data and photos into compelling multimedia stories.

To see how storytelling through data visualization can bring report publishing to life, see the ITC multimedia report, [Trade Trends for Small Business – Insights from the World Export Development Forum 2023](#).

**Figure 6** [Storytelling with data and video](#)



This popular BBC video on YouTube shows how excellent content, messaging and AI-powered tools can bring a story to life.

**Figure 7** Visualization tools allow statistics to scroll

Scrolling data can be a powerful addition to good communications practices. In this case, the publishing platform Foleon now includes some visualization tools that allow statistics to scroll, for example.

Source: Trade Trends for Small Business – Insights from the World Export Development Forum 2023, ITC.

**Figure 8** Storytelling with videos as case studies

Case study:  
**Organic products**  
Meet consumer needs while supporting local communities

[Read the full story](#)

Case study:  
**Digital services**  
Landlocked, not mindlocked: Digital brings flexibility

Using videos to draw the reader at the first level, and then using magazine-style articles at the second level, can be an effective way to combine AI-powered publishing tools for online viewers.

Source: Trade Trends for Small Business – Insights from the World Export Development Forum 2023, ITC.

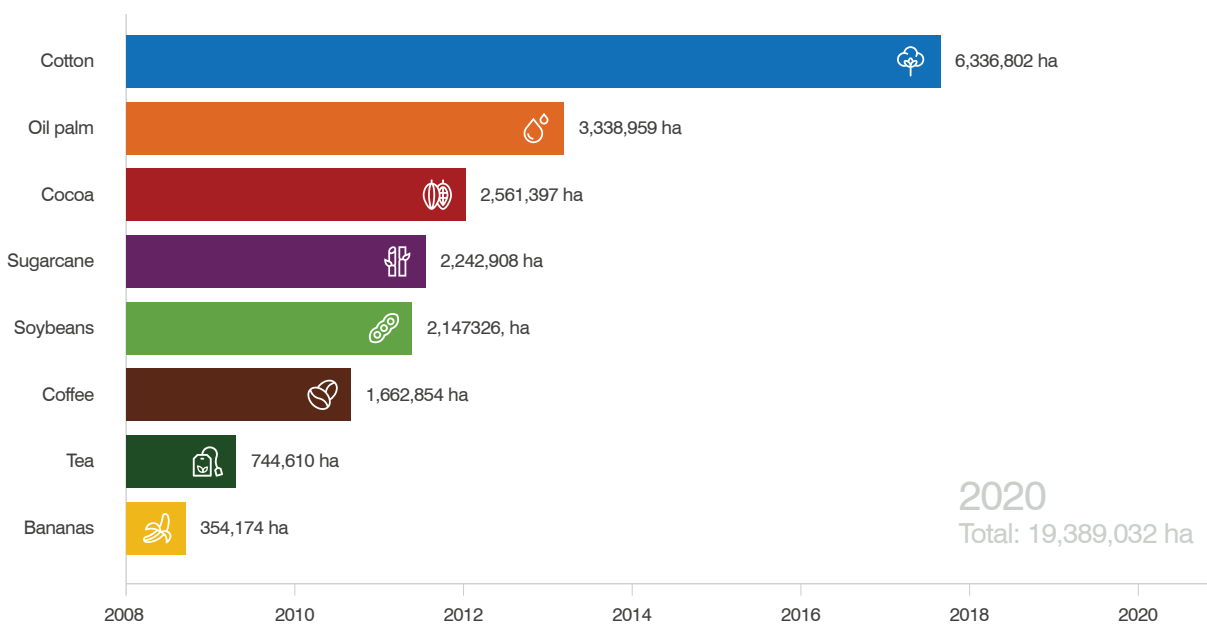
What makes these pages effective in a multimedia publishing report? To be sure, a combination of AI-powered tools made a difference. Speech-to-text transcription in video post-production greatly accelerated the process. AI-powered software to make the large figures spin is now embedded in the hosting platform.

The final result would not have been possible without a team, each with its roles: writers who were willing to write crisply, always start with a statistic and source their choices; designers who understood how to apply corporate branding within AI-powered templates; content creators who understood the topic. Note how little text is used to get the topic and key message across; how text and visuals tell a story together; how content is sequenced – presented to readers in manageable steps – and how both human cases and statistical evidence are used in storytelling.

In other words, animating the statistics is the easy part. Content curation took judgement, sharp writing and consistency from communications experts who understand trade development issues, with fact-checking by experts who work daily on topics such as youth entrepreneurship, women in trade, green trade, digital trade and trade facilitation for landlocked countries.

The multimedia example of the State of Sustainable Markets report, the data visualization tool Flourish uses data to create dynamic graphics that were then embedded in a multimedia platform. The virtual project team included tech savvy content-matter experts, communications experts, and editors to shape the concept and messaging. Subsequently, the report is updated annually with light guidance from the communications team which focuses on messaging and editing, while content matter experts have taken the lead in selecting data, updating data visualization graphics, and contributing content within the initial template.

**Figure 9** Statistics over time: Better online



Source: Reports with statistics over time tell a stronger story with data visualization tools that display the ebb and flow of trends. See this LinkedIn post: [https://www.linkedin.com/feed/update/urn:li:activity:7150846641506250752/drawn from the latest multimedia report on the State of Sustainable Markets](https://www.linkedin.com/feed/update/urn:li:activity:7150846641506250752/drawn%20from%20the%20latest%20multimedia%20report%20on%20the%20State%20of%20Sustainable%20Markets) at <https://bit.ly/3RRDoBB>.

Multimedia reports are generally hosted on an institution's website, integrated with a traditional publishing catalogue and then broken down into 'snackable content' for social media.

With early adopter cases in place, one can bring data visualization training to a wider circle of early adopters. The aim is to understand how to communicate with these tools, develop basic skills and then move to more specific applications. The communicators are also developing multimedia templates for different types of information needs, so colleagues can use the tools more efficiently and with greater impact.

These examples show how a stronger voice of communications professionals within organizations can help to bring the culture change that must accompany these AI tools.

Success hinges on a coordinated approach to get data visualization in place. This means integrating the voice of communicators who often have a combined understanding of editing, storytelling, useful digital tools and what readers find of interest.

IT managers are also critical – they must coordinate competing products and staff requests for technical assistance, and often hold the budgets to acquire and/or approve digital tools used at an organizational level. Those who manage projects and conduct research can be trained on how to use AI technologies, improve storytelling skills and manage the ever-present risks that come with AI-generated opportunities.

**Figure 10** Human reporters as commodity: AI newscasters



Is this the future of broadcast journalism? See here: Full news programmes based on AI-generated newscasters are now emerging. This example is from a New York-based start-up using content from human reporters at well-established wire services such as Reuters and The Associated Press. The humans provide the 'commodity' – news facts and analysis. The avatars look and sound like tv news presenters. They speak in multiple languages, with relevant lip movements and vocal character. Interviewees also appear in those languages. Viewers can select news stories based on a customized list of interests.

The generative AI used for the news programme also simulates camera footage. It says the result is 'similar to a courtroom sketch, not a literal depiction of actual events, but can still provide important information or nuance to a news report'. The company adds: 'Wherever AI has been used to add context, or in any way alter existing sources or actual depictions of events, on-screen graphics will clearly indicate the nature of the alteration. Human editors and producers are also involved in checking the stories for accuracy and clarity at every step of the process.'

Source: Newatlas, 2023.



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## BUSINESS VOICE

# Artificial intelligence and journalism: Reflections of a business journalist

Victor Kiprop

Business journalist

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Journalism and the news media have undergone a massive transformation over the past two decades, thanks to disruptive technologies and innovations. The growth of streaming services and the rise of social media platforms as major news sources have altered audience consumer patterns, boosted competition and disrupted traditional revenue models.

Add to this the emergence of artificial intelligence, which has taken the industry by storm at an unprecedented pace and on an astonishing scale, triggering a revolution in the way news organizations operate. From content generation and distribution to audience engagement, AI technologies are reshaping journalism as we know it and creating both huge opportunities and serious challenges for news organizations, journalists and their audiences.

While the use of AI technologies by the media is certainly not new, the emergence of generative AI and sophisticated large language models such as ChatGPT and Google's Bard has marked a significant shift, taking AI closer to the very core of journalism.

This class of AI algorithms has shown remarkable abilities to generate fresh content in different formats including text, images or videos – so good that it is difficult to distinguish the work of a hardworking creative from that of an intelligent machine.

A recent survey<sup>11</sup> on the use of AI by news organizations across the world revealed that most newsrooms – 90% in news production, 80% in news distribution and 75% in news gathering – use some form of AI.



## Gamechanger

For business journalists whose work largely involves sifting through large volumes of data to spot trends, patterns and insights, AI has been nothing short of a gamechanger. From analysing financial statements, interpreting economic data and tracking movements in securities market, different AI tools have made work easier for business journalists.

Automating content is not new. Thomson Reuters began automizing the generation of financial articles on its digital platforms in 2006. The business news desk of The Associated Press began automating stories about corporate earnings in 2014 and, using the AI system Wordsmith, went from 300 articles that year to about 4,000 per quarter today. Automating these stories helped companies share information that gave credibility to their business. Meanwhile, writers could focus on higher-impact journalism, with new projects and more time for thought leadership stories.

For the news industry, as AI tools become more sophisticated and powerful, they will continue to play a bigger role in news generation. Suffice to say, AI is here to stay – if not to take over.

Yet humans will still remain at the heart of the business. It's not only that journalists offer creative, compelling content. We have the ability to be empathetic in ways that AI simply can never be.



### Natalie Domeisen

*Head, ITC corporate events and publishing programmes*

## Q&A

Natalie Domeisen and Victor Kiprof explore AI's impact on business journalism, small business and trade institutions in this Q&A.

### Q. How will business journalism evolve?

**Accuracy.** In the fast-paced and dynamic world of journalism, everyone wants to be the first to break the story. But good business journalism hinges on getting the numbers right. And that's where AI comes in.

Take Bloomberg's Cyborg technology, for instance. Tireless and largely accurate, the tool can instantly dissect a financial statement and immediately churn out a news article containing the key figures and insights.

**Data-driven stories.** People can expect to see more data-driven and visualized business stories. Think of voluminous economic reports that run into hundreds of pages. Tools such as IBM Watson and Graphy can quickly analyse the vast amounts of data in the documents, identify trends and create interactive charts and graphs.

And thankfully, automating the tedious processes of research, data analysis and fact-checking gives us journalists ample time to weave captivating narratives around the numbers.

**Predictions.** Can AI tools help predict stock market movements? Some researchers think so. Watch this space.

### Q. It's said that the pen is mightier than the sword. Will AI become mightier than the person holding the pen?

**A.** As AI shapes the future of journalism, no one wants to be left behind. Many of the world's biggest and most reputable news outlets, including The Washington Post, The Wall Street Journal and the BBC, already use different AI tools to automate tasks and improve their overall efficiency in the newsroom.

Google is experimenting with a flagship technology named Genesis capable of generating news articles on just about every subject depending on the data fed into it. Google has already pitched Genesis to several major news outlets.

The rapid deployment of these cheaper technologies, which can do nearly everything a journalist does at a faster pace, have raised serious questions in the mind of every journalist: What is the future of journalism with AI-generated content? Will AI take my job?

Amid the fanfare around the shining promise of AI and its potential ‘takeover’ of journalism, serious concerns abound. Despite their commendable role in helping journalists to create content, AI tools have also become notorious for aiding the creation of fake images and articles. If the data used to train it contain biases, the AI system will most likely perpetuate or amplify these biases.

**Q. We hear of job cuts at major news organizations. What, in your opinion, is the best survival strategy for business journalists?**

**A.** It’s true. British, US and Canadian media outlets scrapped almost 8,000 jobs in 2023, according to the Press Gazette. Faced with competition from social media platforms and dwindling revenues, news organizations are desperate to increase productivity and cut costs. AI promises to be a valuable ally.

I happen to agree with Mathias Döpfner, the chief executive of German media and tech giant Axel Springer, who warned in March 2023 that journalists were at risk of being replaced by AI technologies and ‘only those who create the best original content will survive’.

Still, many analysts say AI is far from replacing journalists entirely.

‘No AI, no matter how sophisticated, can replicate the human ability to empathize with other humans,’ Japanese journalist Mei Shigenobu wrote in an AI Jazeera column in July 2023.<sup>12</sup>

‘Nor does it have the ability that journalists do to convey what touches and moves them as they connect with and tell the stories of their subjects. This human connection allows journalists to understand, respect and authentically convey experiences to their readers and broadcast audiences.’

AI will undoubtedly continue to transform the media industry positively through efficient news production processes, improved accuracy and expanded coverage. But the ‘human touch’ in journalism will remain critical and irreplaceable.

Striking a harmonious blend between harnessing the potential of AI and maintaining the integrity of journalism is the way to go.

**Q. What takeaways do you have for small businesses and trade organizations?**

AI is a double-edged sword. Wield it judiciously.

**Use it to produce more content.** Business journalists rely on accurate data and insights. With the help of AI, trade associations and SMEs can put out much more content including reports and promotional materials that boost engagement and visibility.

**Leverage AI for marketing, too.** Most SMEs spend 5%–10% of their revenues on marketing. Whether it’s X or TikTok, AI tools help you create ad copies for each platform and deliver hyper-personalized marketing to increase visibility and cut costs.

But trade institutions should go further and work to **address policy gaps**. There’s need to champion policies and ethical frameworks that guide the deployment of AI technologies, especially around privacy rights.

Most importantly, **keep humans at the heart**. With the proliferation of AI-generated content, humans at the heart of trade research as well as publication processes makes it stand out.

Takeaways

*Small businesses and trade bodies should:*

- Produce original, insightful content for journalists
- Leverage AI for marketing
- Address policy gaps
- Keep humans at the heart



Jo Maxwell-Scott

Former broadcast producer



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## BUSINESS VOICE

# Video tips for small businesses: AI-powered trends

Former broadcast producer Jo Maxwell-Scott now works for United Nations organizations and non-governmental organizations. She has worked with ITC to co-train and produce videos from developing country entrepreneurs and trade support institutions. She managed the video production team at the World Export Development Forum in Mongolia in 2023.

The videography landscape has always been a rapidly evolving one. Digital, most recently, has pushed it into the limelight. In 2023, there were over 3 billion digital video viewers worldwide.<sup>13</sup> Now AI is disrupting the industry with revolutionary ways to generate and edit content.

The main drivers of this AI revolution are video tech companies which are innovating and jostling for a share of a rapidly expanding market. The upside is a plethora of content-creation apps rolling out new AI features, creating opportunities for trade organizations and businesses to raise their visibility.

If once these companies specialized in a single service, they now bundle the assets to post-produce video into a one-stop shop: music, stock images, graphic elements and more. Vimeo, traditionally known as a high-quality hosting platform, is reaching out to content creators with an 'everything you need to make, manage and share' approach. Canva, the graphic design app, has video editing possibilities along with its design templates. Shutterstock, the stock footage site, now offers 'creative AI' tools to design and edit stock images.

What are the AI-powered tools behind these offerings?

Look out for industry leaders Adobe (Premiere Pro, Rush), DaVinci (Resolve) and Apple (Final Cut Pro with plugins). AI automation speeds up workflows with text-based editing (including bulk deleting filler words), auto colour correction, cleaning audio, audio-to-text transcription and subtitles. For those of us who produce content with colleagues across different countries, the latter is a game changer. Interviews and speech – including in different languages – are transcribed in seconds and subtitles are quickly generated.

General users will find a host of capable smartphones and desktop apps such as InShot, Filmora or CapCut with consumer-oriented AI video-editing features.

Pika and Runway take generative AI to new levels, with video creation using text prompts, reimagining and transforming images. Still experimental, these start-ups are attracting heavy investment, with Pika claiming its creators generate millions of videos per week.

### Figure 11 Visual diversity: AI generators ignore inclusivity



Source: [This is why you shouldn't mix AI Image Generators with Barbie](#), London Interdisciplinary School, 2023. This image, which shows Sudanese Barbie holding a rifle, was created by the popular AI generator Midjourney, based on word prompts and published by the US digital media company BuzzFeed. Similarly, an AI-generated German Barbie was dressed in a Nazi uniform. This video report explains how AI generation reinforces stereotypes, reduces accuracy in diversity and contributes to misperceptions.

### Multilingual avatars

Training and development videos can be expensive to produce. Not surprisingly, generative AI is charging through this sector.

Synthesia and HeyGen are leaders to watch. Top of their innovation list is digital multilingual avatars, saving filming time and translation and voiceover costs. And if these avatars don't meet your needs, then why not customize, by cloning your own voice or even talking in different languages?

There can be major wins for the training and development sectors, particularly across regions and languages. But there are also red flags, like the potential for deepfakes and the undermining of credibility and trust.

### Beyond keywords: Better searches

Stock footage companies such as Shutterstock innovate with AI-powered search capabilities to help users better locate B-roll and stock footage. Users can search with visual cues such as colour, composition and subject matter, and get more fine-tuned, relevant results.

### Caveats

**What's fake, what's real?** AI video generators help users take existing footage and reimagine it, by changing backgrounds and details. With concerns rising about deepfake videos, and as AI-manipulated footage improves, spotting 'fake' from 'reality' will get much harder.

**Take time to fact-check.** Like ChatGPT, AI-generated video needs to be checked and edited. Time must always be reserved to review and revise transcripts and translations.

**Diversity remains a challenge.** AI-generated content relies on data that is already searchable, of which much is US- or Western-oriented and lacking regional and cultural diversity. Prompting can also raise preconceived or stereotypical biases. The YouTube article ‘This is why you shouldn’t mix Barbie with AI Image Generators’ illustrates this well.

**Ethics is rightly a hot topic.** Does AI-generated footage make it easier for footage already ‘out there’ to be used for other purposes, manipulated or taken without permission? What about AI’s ability to clone voices, and who will then use or replicate them? Who might be put at risk? There are compelling issues of security, consent and copyright that need to be addressed.

## Back-to-basics for organizations

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### Focus on values

AI-powered video tools are potentially hugely useful, even transformative. Like all AI content, judgement, ethics and values stay the same:

- Does this video/footage accurately represent what you want to communicate?
- What is the source? Have facts been checked?
- Are people fairly, factually and safely represented?
- Are there ethical or security issues with its use?
- Is there a licence and consent to use?
- Is this video/footage labelled AI-generated?
- When is using AI-generated video useful? When should it not be used?

### Figure 12 Reaching new audiences: AI-supported translation

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*Video reporting in multiple languages has taken a leap forward with AI technology. HeyGen Labs | French Translation was used to create this example.*

*The new term is vubbing (video dubbing), and it offers magical opportunities to reach new audiences. This example takes the author’s original broadcast in English and puts it in perfectly fluent French. But how far should the magic go, in a world where deepfakes are rising and trust in what we see is declining? Here, the best thing may be simply to label the video, ‘AI-supported French translation’.*

FOCUS ON CONTENT

Organizations' and businesses' own visuals will be as important as ever as AI-generated content begins to proliferate. Authenticity, nuance and human connection are still essential for effective storytelling. Thanks to affordable filming equipment and editing apps boosted by AI, producing quality audiovisual content has become easier and more affordable.

AI is taking us down a new path, one that is creating exciting opportunities for multimedia publishing. It is giving content creators time-saving tools and making video even more accessible to produce. Barriers to multilanguage communication are breaking down. Organizations may better be able to search and manage their content and asset libraries. Even AI-created video can convey stories creatively and conceptually. However, vigilance and careful strategies are needed to use AI in responsible and transparent ways.



**Natalie Domeisen**

*Head, ITC corporate events and publishing programmes*

Q&A

Natalie Domeisen and Jo Maxwell-Scott explore how small companies can get going on video production.

**Q. How can small companies use AI video tools best?**

Video is a powerful means of reaching audiences. Explore how these tools can be part of marketing plans. Allocate time for staff to try out tools, learn and collaborate with content creators. There are also lots of online tutorials available. Videos can be created with a written text, converted automatically with the author or a chosen avatar to present content. One can even clone a voice and select a language. If they have an existing video, they can drag and drop it into software, and AI video translators will dub the speaker in the chosen language, lip-sync and match the voice. ITC tested this out with an English-to-French translation using one of its videos, with astonishing results. **Explore: HeyGen (40+ languages), Synthesia (70+ languages).**

**Others: Descript, Create Studio.**

It is getting easier to create short videos with your phone and edit them for social media. 'Magical AI' tools help, for example, by adding captions and effects, suggesting improvements using algorithms, converting text to voiceover and resizing videos. **Examples: CapCut, Inshot (mobile), Filmora.**

**Q. Are these tools affordable?**

Costs are not prohibitive. Free versions of AI video apps may be enough, or month-by-month subscriptions. For example, multilanguage translations for small businesses could cost less than \$60 for 30 minutes of video a month, which is a fraction of the costs by traditional means. Do keep in mind that AI video apps are new and will have glitches. Many of these developments are coming from the United States, so can be English-language and culturally centric.

**Q. What would you advise for communications departments?**

If companies or institutions are big enough to afford a communications department, they may find the video software platforms used by professional editors better suited to their needs: Audio-to-text transcriptions and subtitles done in seconds, auto-colour correction and cleaning audio are a few AI features speeding up workflows and trimming production costs. **Consider: Adobe Premiere Pro, DaVinci Resolve, Final Cut Pro with plug-ins.**

On a creative level, one can also collaborate with artists and creators to produce AI-generated video art. Designers and videographers are also experimenting with generative AI that creates video from text prompts. Type in 'girl cycling on a road'. See it come to life. Then change the details (for example a red bike, not a blue one). Creators can conceptualize and reimagine worlds from words, turning them into animation or video. **Explore: Pika, Runway.**



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## BUSINESS VOICES



**Deepesh Patel**

Editorial Director at Trade Finance Global

# Crafting the cover of tomorrow: GenAI in trade finance reporting

Deepesh Patel is Editorial Director at Trade Finance Global. He leads efforts to develop the trade finance fintech's brand, relationships and strategic direction in key markets, including the United Kingdom, the United States, Singapore, Dubai and Hong Kong.



**Carter Hoffman**

Research Associate at Trade Finance Global

Carter Hoffman is a Research Associate at Trade Finance Global, focusing on macroeconomic trends and emerging technologies in trade.

Artificial intelligence is not new.

In his 1872 novel *Erewhon*, English writer Samuel Butler explored the concept of machines with human-like intelligence, the first known reference to what would come to be known as artificial intelligence. And 150 years later, in November 2022, tech company OpenAI unveiled its generative AI tool – ChatGPT – awing its rapidly growing user base with its ability to write coherent, human-like text.

Throughout 2023, generative AI tools transitioned from being mere novelties to becoming key tools across various sectors, revolutionizing how businesses approach customer service, content creation and data analysis.

Many industries, like payments and trade finance – which entail intricate and complex operations including credit risk assessment, documentation verification and supply chain management – are beginning to explore how they can fully leverage generative AI within their processes.

Darren Parslow, Global Head of Visa Commercial Solutions, said, 'Having been commercialized for barely a year, our industry is still figuring out the multitude of applications of generative AI across the commercial payments ecosystem.'

Many observers feel that generative AI tools can revolutionize trade finance by reducing the time and cost for manual processes and increasing the accuracy and efficiency of many operations. Other experts hold a more measured view, like Sean Edwards, Chairman at the International Trade and Forfeiting Association, who said, 'Artificial intelligence is here to stay, but I don't expect an AI Revolution.'



## AI in trade finance

The artificial intelligence world can seem rather confusing, with nuanced terms that seem to mean similar things.

While AI provides the broad framework and capability to mimic human-like tasks, machine learning delves deeper into learning from data patterns and improving over time. Large language models and generative pre-trained transformers take this a step further by learning from data, and actively generating new content based on that learning.

Together, these technologies can significantly enhance the operational efficiency, accuracy and predictive capabilities in trade finance.

**Artificial intelligence** in trade finance includes automated data processing, risk assessment or even complex decision-making. Ultimately, AI would be the foundational technology that drives overall operational automation and efficiency.

**Machine learning algorithms** are well suited to trade finance, as they can analyse historical data to make predictions or decisions. In credit risk assessment, algorithms can learn from past loan data, market trends and company performance to assess borrowers' creditworthiness more accurately. Algorithms can analyse supply-chain data to identify patterns and predict disruptions, aiding in proactive risk management for credit providers. This continuous learning and adaptation is valuable for tasks where patterns and relationships within data evolve over time.

**Natural language processing and large language models** are also well suited. Natural language processing can automate the information extraction from loan applications and financial statements, for quicker credit decision-making. LLMs can automate the drafting of complex financial documents, generate reports and provide insights by analysing text-based financial data. Their ability to handle nuanced, intricate language helps us understand the complexities of legal and financial documentation.

**Generative pre-trained transformers** can simulate financial scenarios, create comprehensive risk assessment reports and even interact with users in natural language to provide customer support or advisory services. They can generate predictive financial models which provide deeper insight into potential credit risks with different borrowers. As GPT models get 'trained' with data, they produce new content which may offer innovative solutions for content creation and scenario analysis.

At Trade Finance Global, we ran an experiment to explore the capabilities and limitations of AI in creative design.





### Crafting creativity: The magazine cover story

In the latest issue of Trade Finance Talks, our team tried something different: we used AI to help us design the cover page.

We started by inputting relevant themes and concepts – centred around current trends and forecasts in trade finance – into ChatGPT and Bard, which generated various concepts, images and layout suggestions based on these inputs. The results offered a range of interpretations and visual representations.

After this first round of prompts, recognizing the potential for unconscious bias in AI-generated content, we deliberately set out to ensure that our design represented the diversity of our industry. This step was crucial to align the output of AI with our publication's broader objectives and values.

Integrating the AI-generated images into a coherent design required manual intervention, and our team of designers played an essential role in bringing this final image to life. They adjusted the colour schemes, typography and overall layout of the AI-generated image to ensure the final cover would be consistent with our standards and visual identity.

The final cover of Trade Finance Talks resulted from this collaborative process between AI-generated ideas and human design skills and helped demonstrate the practical application of AI in a professional setting.

Using AI did not replace the human design expertise needed for a visually striking cover. It simply augmented it, allowing us to create this cover in less time than it otherwise would have. This same idea extends across the broader applications of generative AI in trade finance: the technology will not replace the need for skilled humans but make it easier for them to do their jobs.

As we reflect on our journey with AI in crafting the Trade Finance Talks magazine cover, it's fascinating to see how a concept that Samuel Butler mused about in 1872 has evolved into a tangible, versatile tool in our modern world.

Our experiment with AI in design, much like Butler's imaginative foresight, straddles the line between reality and science fiction. It's a poignant reminder of how far we have come in understanding and applying AI.

The nuanced blend of AI-generated ideas and human creativity in our cover design process mirrors the broader integration of AI in trade finance, enhancing rather than replacing human expertise.

And who knows? In the not-too-distant future, we might delegate the task of writing articles like this one to a generative AI. But rest assured, for now, it's still human hands at the keyboard, albeit with a wry smile at the thought.



## CHAPTER 5

# REACHING AUDIENCES IN AN ONLINE ERA

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## CHAPTER 5

## REACHING AUDIENCES IN AN ONLINE ERA

The key to successful publications marketing is to create a connection with your audience and to excite readers about your publication, no matter the format. Today, one needs to know how to reach that audience, especially online.

Business support organizations regularly provide content of ‘evergreen’ importance to small firms. This chapter outlines the changing context to reach online audiences and offers basic advice to small firms on how to market essential content in the online space. It also outlines AI tools for outreach and presents social media platforms, as well as developing country perceptions of major platforms.

## Online outreach: Expect big changes

The online content surge (including AI-generated content) and evolving AI tools make distribution ‘set for a major upheaval’, says the Reuters Institute for the Study of Journalism. Its December 2023 survey of 314 news leaders in 56 countries (editors-in-chief, chief executives or managing directors, and heads of digital innovation) shows an industry in flux.<sup>14</sup> AI rules and guidelines are emerging, as senior editorial figures are appointed to coordinate policies, technology and training. Among news leaders surveyed, 16% had already designated AI coordinators and another 24% planned to do so.

These trends can affect your own outreach and distribution strategies. While earlier chapters on content creation and production cover some points that emerge from the survey, they show how content and outreach work together to reach audiences online.

- **Trust** – In the context of reaching online readers, more than half of news publishers find AI for content creation to be the biggest reputational risk.

Meanwhile, AI is being integrated into fact-checking workflows. The United Kingdom’s leading fact-checking organization, Full Fact, uses AI tools to support human fact-checkers. An example is speech-to-text transcription, which accelerates analysis of real-time broadcasts to match them to previous fact checks.

- **Changing narratives that affect trade** – Lack of trust, insufficient diversity and unsettling topics (conflict, climate change) are spurring solutions-oriented reporting. Bloomberg Green has more specialist coverage on green tech, for example. RTE (Ireland) has a Climate Heroes series that showcases businesses and individuals taking action. Media institutions also turn to locals to tell their business stories in conflict areas, including on Instagram and TikTok.

- **Videos vs text, especially for young audiences** – Text-based articles have been at the heart of online distribution from the beginning of the internet. Text articles are searchable, linkable and can even be sold online. New devices, platforms and cultural practices are changing this predominance.

Young people are now a majority in the world, and they prefer to learn and consume content via video. While analytical content creators (especially newsrooms and public institutions) still rely on the written word, they are moving into multimedia production. To attract online audiences, newsrooms plan a significant increase in videos, while keeping the number of articles stable. And while videos still mostly feature real people, AI presenters are on the rise.

- **Text creation is changing to boost online distribution** – AI-generated bullet points are being inserted above articles; human editors are testing and reviewing AI-driven, search-optimized headlines. These practices boost readership.

AI-driven translation and editing tools, customized with style guides and spellings of news publishers, speed up production. One result is that major non-English news publishers are quickly expanding their English editions.

AI speech-to-text tools also are accelerating notetaking and transcription needed to produce articles and videos.

- **Social media platform referrals** – Algorithms prioritize TikTok and YouTube creators over traditional news publishers. Facebook referrals to news sites dropped 48% in 2023; X referrals to news sites fell 27%.

WhatsApp is now seen as the best opportunity for referral traffic, due to a new feature to create broadcast channels. (Users can follow, subscribe, react or forward content, but there is no open commenting.) WhatsApp broadcast channels have the potential of newsletters and push notifications to reach audiences. LinkedIn, a 'business network', is seen as the next best source for referrals.

- **Online search** – Content owners seeking visibility on Google still need to master search engine optimization but should beware of changes due to Google's Search Generative Experiences. ChatGPT, with its important investment from Microsoft, popularized AI-infused content generation. Google's Gemini – AI-generated search across text, images, audio and video that powers Bard – is being tested in more than 100 countries with text or voice queries. The new service shows links to original references, but they are less visible and fewer in number.
- **Subscriptions and paywalls** – Target your newsletters and consider subscriptions. While big publishers may negotiate licensing with AI platforms, most publishers will not have that possibility. Therefore, news publishers will strengthen subscriptions and paywalls, and invest in newsletters to reach audiences directly.
- **Personality-driven chatbots** – Look out for historical figures, famous journalists or well-known personalities, thanks to better cloning techniques. They raise questions about intellectual property and ethics; inappropriate conversations also are a serious risk.
- **Gadgets** – AI technologies will supplement the smartphone, including voice-activated headphones and smart speakers, augmented reality glasses, virtual reality glasses and lapel pins.

## Marketing evergreen business topics

Build your brand with original, relevant content. Be partnership-oriented in answering your market's needs.

Just as the branding of a company or an institution should have a unique selling proposition for its clients, reports on environmental compliance and sectoral market opportunities are examples of topics always of interest to business audiences.

In an era where so much information can be found online, what matters most is finding the unique angle and original, specialized content.

Branding that content by creating a series, an annually recurrent report or a national version with locally customized versions helps reports stand out in a crowded market.

Partnerships are equally important. Because they expand the sense of ownership, they make content richer and unique. Partnerships can be used to conduct surveys, contribute specialist insights, offer thought leadership commentary and develop translations. These partnerships also create value because of complementary networks that bring wider distribution and exposure to target audiences.

Among such partners could be banks, universities, foundations, related ministries, regional trade bodies and national business associations – these are just a few.

Explicitly consider partners with large online audiences that are specifically interesting for the content of your report. Coordinating promotion online with these traditional partners can help your reports stand out.

## Standing out online

Keep titles short, content-rich and searchable online. Search engines are happiest with key words that are simple and used often by readers.



While writing, develop content that can be broken down and shared in small bits as a mini 'campaign' on social media to tell your story. Use consistent online branding (repeat the image of a book cover, title, tagline or hashtag, for example). Text is never enough – videos, photos, polls and even emojis engage readers. Among the types of content that can be drawn from a report are:

- An original statistic that relays an important concept, brought to life with a data visualization tool
- Quotes and photos from key contributors or stakeholders
- Before and after photos
- Polls that answer fun facts or a Did You Know series
- Video interviews (under 2 minutes, ideally) that capture key report findings
- Market shifts over time, shown through moving bar charts

## AI tools to market publications

Marketing a report in today's digital landscape can be enhanced with AI tools. AI tools help advertise reports, edit and design marketing materials, track outreach efforts and schedule social media announcements.

**Table 4** Marketing publications: AI-powered tools

Task	Where AI tools add value	Examples
ADVERTISE ONLINE	Ad-targeting platforms use AI to target advertisements to specific demographics, interests and regions, ensuring that your promotional efforts reach the most relevant audience.	Platforms like Google Ads or Facebook's advertising system
DESIGN MARKETING MATERIALS	AI-embedded design tools create visually appealing marketing materials such as posters, social media graphics and book covers with ease.	Canva or Adobe Spark
EDIT MARKETING CONTENT	AI writing assistants polish the content you create for marketing (such as blog posts and newsletters) but also suggest improvements in style and tone to make your writing more engaging.	Grammarly or ProWritingAid
CUSTOMER RELATIONSHIP MANAGEMENT	CRM software now uses AI to manage your interactions with potential readers and customers, track sales and automate marketing efforts.	Salesforce or HubSpot
E-MAIL MARKETING	E-mail marketing platforms personalize e-mail content, optimize send times, segment audiences and track the effectiveness of e-mail campaigns.	Mailchimp or Constant Contact
INFLUENCER MARKETING	Collaborate with experts and thought leaders in your book's genre or subject matter for book promotion.	BuzzSumo or AspireIQ
FIND READERS	Predictive analytics tools use AI to analyse your organization's website traffic to identify prospective readers.	Google Analytics or Adobe Analytics
OPTIMIZE SEARCH ENGINE	SEO tools help optimize your website for search engines, making your book and related content more visible to potential readers online.	SEMRush or Yoast SEO
SCHEDULE SOCIAL MEDIA POSTS	AI posting tools can suggest the best times to post and provide insights into your audience's content preferences.	Hootsuite or Buffer

Source: Authors.

## Developing online messages

In our online era, it's important to promote publications to personal connections, thought leaders and relevant associations or networks, and not just rely on institutional channels.

AI tools such as ChatGPT can be used to generate marketing ideas. See the 'prompts for marketers' section in Appendix IV.

### SOCIAL MEDIA MESSAGING

**Engagement questions:** 'What are the best sources for information on [topic of book]? We'd love to hear your recommendations as we prepare for the launch of [book title]!'

**Teasers:** 'Sneak Peek! Here's an excerpt from the upcoming publication [book title]. What do you recommend to [action point]?'

**Behind the scenes:** 'Ever wondered how a publication goes from concept to launch? Here's the team behind the upcoming publication [title].' Take a few screenshots when the author and design teams meet.

**Polls and surveys:** 'Help us choose! Which book cover suits [book title] the best? Option A or B?'

### E-MAIL NEWSLETTERS

**Exclusive content:** 'As a reader of our publications, we welcome you to the first look at the first chapter of [book title]! Please let us know what you think.'

**Author updates:** 'We're preparing for the launch of [title]. Please let us know if you'd like an advance copy.'

### PRESS RELEASES

**Book announcement:** 'Announcing [title], the latest publication by [organization] that brings a new perspective to redefining [topic].'

**Event information:** 'Join us online and live for the launch of [title] on [date] at [location].'

### ENGAGING STAKEHOLDERS

**Ask them:** Key issues in [topic]: 'Did we get it right? The top 10 issues covered in the upcoming publication, [title].'

**Author interview:** 'Join our upcoming Q&A author session: Your questions about [topic for author of [publication title] answered.'

**Guest posts:** 'Special guest post by [thought leader] on why [book title] is a must-read this year.'

### GOOGLE ADS, FACEBOOK ADS

**Attention-grabbing headlines:** 'Discover the book you've been waiting for: [title].'

**Problem-solution:** 'Have you tried to make sense of [topic]? [Title] features thought leader perspectives on x and recommends y'

**Testimonials/reviews:** 'A masterpiece!' says [reviewer] about [title]. Find out why.'

### YOUTUBE AND INSTAGRAM STORIES

**Book trailer:** 'Watch the topic of [title] be summarized in one minute.'

**Author interview:** 'Get to know the mind behind [title] in our latest author interview.'

**Reader reactions:** 'See how readers are reacting to [title].'

## Global and regional social media platforms

**Figure 13** Major social media platforms



Source: Reuters Institute for the Study of Journalism, University of Oxford

Just as English has become an Esperanto of international development, trade and business, US-owned companies dominate the possibilities to share content, advertise and measure audience engagement around the world.

Business support organizations and small firms select and master the platforms that they and their companies will find useful in communicating with international buyers, policy experts and funders in specific regions and sectors.

As the publication promotion plan is developed, spend time on global and national social media platforms to determine best engagement strategies – e.g. plan weekly content excerpts, Did You Know? short videos from authors, Q&A sessions, etc., that not only promote the publication, but convey important need-to-know content for your target audience. Authors who feel passionately about their content will naturally become content influencers and thought leaders.

### A PERSPECTIVE ON GLOBAL SOCIAL MEDIA PLATFORMS FROM 'THE SOUTH'

Global digital platforms could go further to include the developing world and their cultural preferences, according to a 2022 study. The Reuters Institute for the Study of Journalism surveyed 11 digital publishers in eight developing countries – Colombia, India, Indonesia, Malaysia, Mexico, Nigeria, Peru and South Africa – to understand their approach to global digital platforms, such as Google, Meta, TikTok, X (then Twitter) and Telegram.

These publishers viewed the platforms as 'inescapable' and powerful, focused on profits and opaque in their operations. They did not find the platforms to be especially interested in news, nor very interested in small or poor markets far from headquarters.



Despite the ‘power asymmetry’ they felt, the digital publishers continue to use these well-established global platforms for the power of their reach. Google was most important (for its search engine optimization). Facebook, Instagram and Twitter also came up. Twitter was considered ‘elite’. YouTube was popular, TikTok, Telegram and WhatsApp were experimental. Those surveyed mentioned that platform popularity shifts and that one must be attentive and adaptable.

## REGIONAL OPTIONS

Always check which globally used social media tools are dominant in a region. Many Europeans and Africans use WhatsApp, for example. But if one tries WhatsApp in Mongolia, communication is more challenging – Mongolians use Viber and Facebook extensively.

At the International Trade Centre, we find our trade-related audiences in developing countries are still very much using Facebook, though they engage most on LinkedIn.

Other platforms can be useful for targeted trade and business outreach. These platforms often offer unique features or are tailored to local needs and languages, which contributes to their popularity in specific regions.

Given data privacy and security concerns, some users prefer platforms that emphasize security. This is why Telegram is growing and has large user bases in countries such as the Islamic Republic of Iran and Ethiopia. Signal, known for its end-to-end encryption, is used globally, including in developing countries, by those who prioritize privacy in their communications.

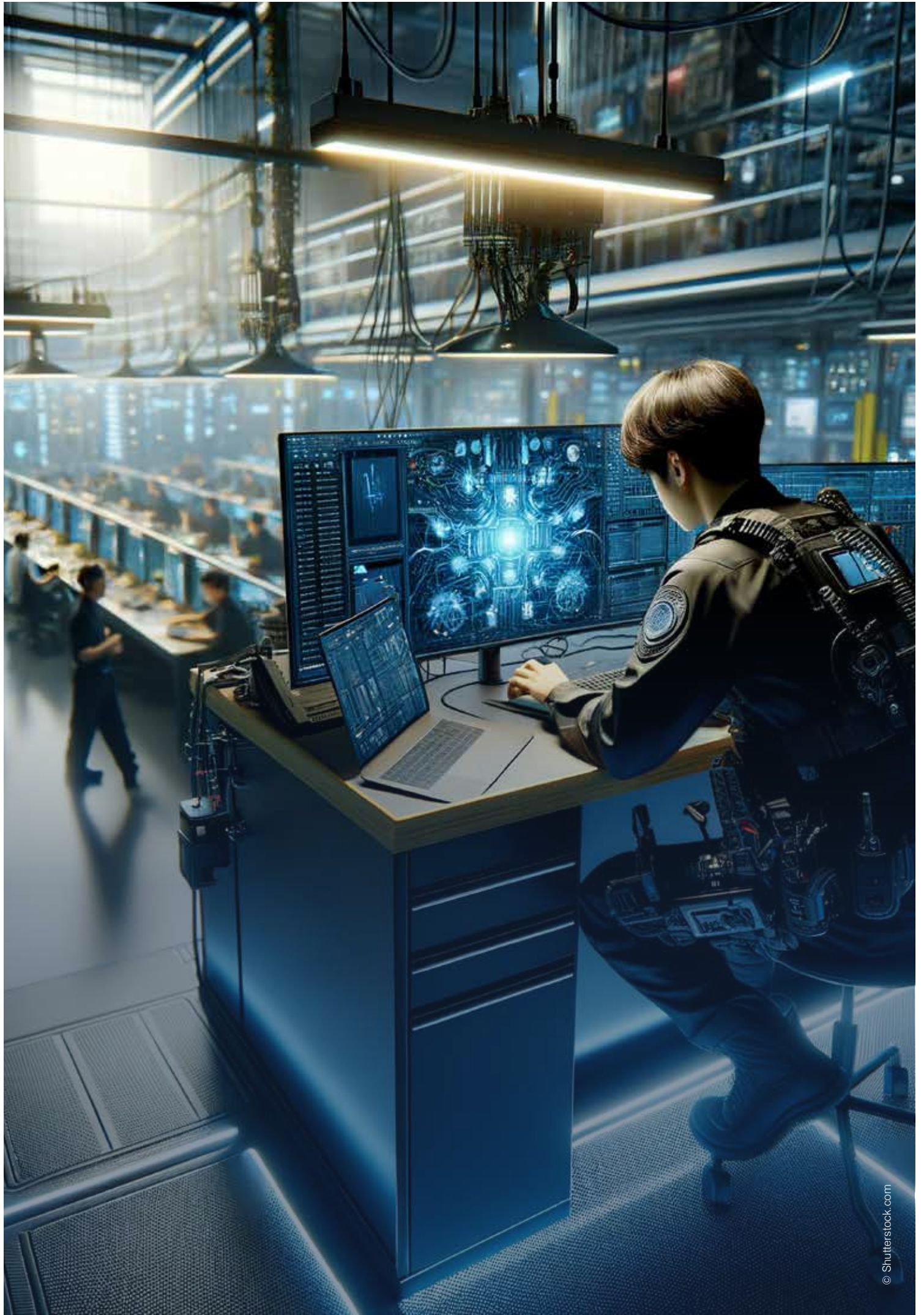
In China, WeChat is a major messaging, social media and mobile payment app, used also in other countries. The popular messaging app QQ, developed by Tencent, has a software service and web portal. Baidu Tieba, a cross between a social network and a forum, is powered by China’s leading search engine, Baidu.

Chinese Taipei, Indonesia, Japan and Thailand use Line, a freeware app for instant communications. Vietnam has Valo, a text and voice messaging app. Republic of Korea has Naver, a search engine with social networking features. KakaoTalk is also a popular social media platform. BiP is popular in Türkiye.

India uses ShareChat, a social networking service, that caters to users in various Indian languages. It also has MX TakaTak, a video-sharing social networking service, similar to TikTok, and Moj, a short video platform that gained popularity after TikTok was banned in India.

Latin America uses Taringa!, a social networking platform.





## CHAPTER 6

# RISKS AND RECOMMENDATIONS

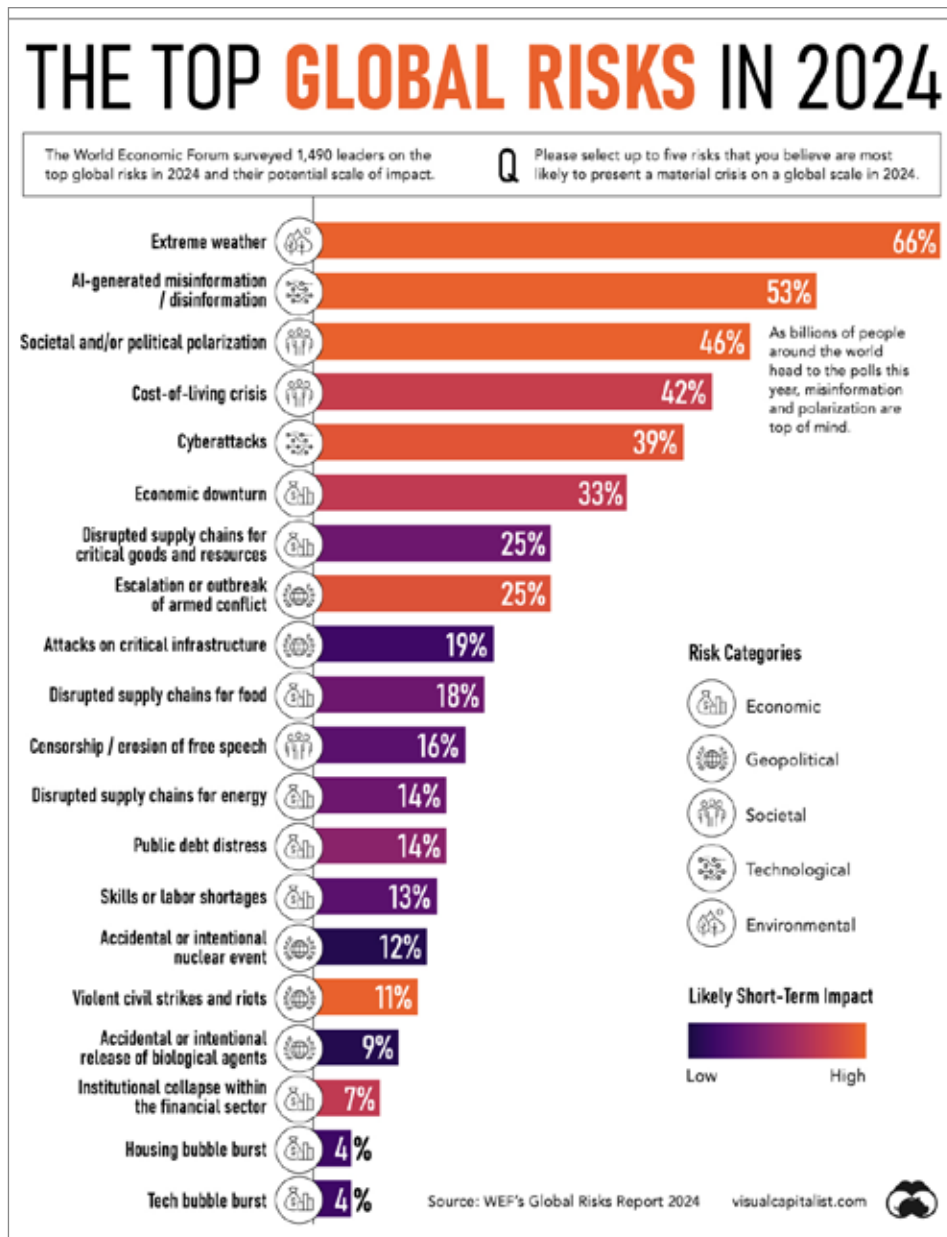
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# CHAPTER 6

## RISKS AND RECOMMENDATIONS

Know the risks, but use artificial intelligence tools for a better publication, updating and revising publications, and to position yourself as a more strategic thought leader.

**Figure 14** Chief executives see AI-generated misinformation as a global risk



Source: Global Risks Report 2024, World Economic Forum, with report data generated into this graphic by Visual Capitalist. Reprinted with permission of the World Economic Forum

## → Manage cultural bias

Large language models such as Bard, ChatGPT and Gemini bring bias into their content generation. These include gender, racial, ethnic, cultural and socioeconomic bias or insensitivity.

Some languages and cultures are also favoured. LLMs scrape information available online to generate text or images that are largely based on English-language news, scientific, technical and literary content. For example, ChatGPT sources its content from US patent documents, Wikipedia, books, scientific journals and news articles including from the *New York Times*, the *Los Angeles Times*, *The Guardian* and *The Washington Post*, but also non-US sources such as *Al Jazeera*.

**Risks** – Perpetuating or amplifying societal biases; unfair outcomes in hiring, lending or legal judgements; erosion of public trust in AI; and ignoring social inclusion and diverse experiences and perspective.

**Recommendations** – Ensure datasets include global data to prevent patterns in bias; adjust models to counteract identified biases; report identified biases to holders of LLMs. If organizations and people prioritize the mitigation of bias, AI in the publication process can contribute to ethical, diverse and reliable content.

## → Combat misinformation

### ENSURE ACCURACY

Inaccuracies in AI responses can mislead, misinform and defame, affecting public knowledge, and may result in harmful decision-making.

For example, in June 2023, a judge in the United States fined two lawyers and their law firm for using six legal cases that were invented by ChatGPT and then used in an aviation injury claim. ChatGPT also invented a sexual harassment scandal and named a law professor as the accused. Researchers and writers must be aware that OpenAI's ChatGPT, Microsoft 365 Copilot and Bard, and Google's Gemini can 'hallucinate' by presenting inaccurate information, cases and examples through what is known as inadvertent or unintended 'confabulations'.

**Risks** – These inaccuracies can erode user trust in AI technologies, pose ethical and legal challenges, and negatively affect businesses relying on AI for data, analysis and operations. SMEs also face risk of financial loss due to AI-driven decisions, brand damage due to misleading content produced by AI and legal liability and erosion of customer trust.

**Recommendations** – Policymakers can implement national law and regulations requiring developers of AI and LLMs to correct known inaccuracies through public, transparent and responsive reporting channels via Google, Microsoft and OpenAI ChatGPT-like large language model query systems. Also, organizations should prioritize verifying the AI-generated information against trusted and authoritative sources.

## FACT-CHECK

LLMs do not focus on accuracy or update their external databases in real time. They generate plausible responses based on their billions of content pieces and machine 'training', which can lead to discrepancies in their fact-checking capabilities.

**Risks** – Not fact-checking can lead to spreading of false or misleading information, damage to an individual's and/or organization's credibility and reputation, adverse outcomes to lives and well-being, and defamation. Incitement and polarization lead to increased divisiveness and conflict in societies.

**Recommendations** – LLMs do not provide citations or list references when answering a prompt. Require authors to reveal where large language models were used to quickly identify where fact-checking may be needed. Subject-matter experts can be invaluable to identify nuance, complexity and outright inaccuracy. They can cross-verify by comparing AI-generated content with reliable sources including academic journals, reputable news outlets and official statistics. Editors, authors and peer reviewers should check for overrepresentation or underrepresentation of certain groups, viewpoints or data.

## ADDRESS TIME LAGS

Understand that content could be out of date. AI tools are trained for a period of time and later sources are not included in their answers. ChatGPT content, for example, has a cut-off date of September 2021.

**Risk** – Current event facts are particularly vulnerable to inaccuracies, as LLMs lag behind months or even years in bringing new content after 'scraping' the global web.

**Recommendations** – Bridge time lag gaps. Search current web sources to ensure up-to-date content; check latest news on reputable news websites; consult experts; subscribe to newsletters, Google alerts and RSS feeds.

## → Think critically

Prioritize critical thinking and analysis. Thoroughly edit all LLM output and infuse one's own voice and style, to ensure content reflects the unique expression and views of individuals and the organizations.

**Risk** – The risk in using large language models instead of human analysis is that LLMs are frequently accused of producing glib content that is often not correct.

**Recommendations** – Ensure a high degree of ideation, discussion and expert review throughout the publication process. Use LLMs as a brainstorming tool; review most sentences in an authentic style and tone; expand on concepts with personal insight, share personal experiences and include best practices, critical analysis and recommendations; include comments from subject-matter experts.

## → Respect intellectual property

### STOP COPYRIGHT INFRINGEMENT

Researchers, writers and organizations must ensure the ethical and legal use of AI technology and respect the intellectual property rights of creators.

We encourage organizations to follow the *New York Times* vs. OpenAI/Microsoft mass copyright infringement lawsuit filed in December 2023. It swings at the foundational underpinning of ChatGPT and other large language models. The *New York Times*, the first major media company to file a lawsuit against Microsoft and OpenAI, accuses them of using at least 16 million articles to train artificial intelligence chatbots without permission.

OpenAI also faces a similar lawsuit from novelists including George R.R. Martin and John Grisham.

**Risk** – Using an LLM that has incorporated copyrighted work into its database can result in legal charges of copyright infringement against the publisher.

**Recommendations** – Understand the source; use Turnitin and other plagiarism-detection tools referenced below; rewrite content; add unique commentary, recommendations or analysis as the named author; seek permission from the copyright holder; create a Google Alert as it pertains to laws regarding AI-generated copyrighted content; consult a legal professional to understand risks and fair use.

### DON'T ACCEPT PLAGIARISM

With 180 million users of ChatGPT, it and other LLMs have changed the way we prepare e-mails and presentations and research, summarize, edit and write content. Content generated only through ChatGPT is likely to be plagiarized.

**Risks** – LLMs generate articulate responses that are often submitted as original work, undermining critical thinking, creating ethical, legal and authenticity concerns, and affecting professional credibility.

**Recommendations** – Use plagiarism or 'originality' detection tools offered by Turnitin, Grammarly, Copyscape, PlagScan, Quetext or others. Require authors to submit content through these tools. Ask authors systematically to state how much content has been generated using AI (to understand veracity and quality-control issues). Determine the organization's acceptable baseline percentage of writing and research that is AI-generated. Many US universities accept originality scores of 20% or below.

## → Manage reputational risk

### ADDRESS RETICENCE TO USE AI

Let's be candid.

AI will save hours, days and weeks from the publication process, including help with market research, writing content, editing, translation, graphic design, creating marketing materials, CRM, outreach and developing training. But what will researchers, writers, editors, designers, communications staff and trainers do with their newfound time?

**Risks** – Some fear being displaced by AI tools or lack familiarity with generative AI tools. Organizations may struggle to evaluate tools and select which to use. Specific departmental units may lack training. Managing a transition well to new roles and responsibilities is also a risk.

**Recommendations** – Have targeted conversations on where researchers, writers and the publications team focus their time. Use the time saved by using AI to bring more visibility to the publication and topic, and to engage with clients, donors and subject-matter experts. For example:

- Convene thought leader discussions to bring increased visibility to the publication and topic
- Post daily 'content nuggets' on social media
- Spend more time engaging with stakeholders and thought leaders on LinkedIn
- Engage with stakeholders by moderating a WhatsApp network

Use AI tools to handle routine inquiries and standard responses (e.g. chatbots); aggregate and summarize information; aid research and analysis for reports, policy papers and briefings; provide rough translations of documents; draft documents, e-mails and other content; integrate data visualization and multimedia publishing into current publishing practices.

**Risks** – Overreliance on LLMs, neglecting critical thinking; exposing organizational data or content to a globally public LLMs; loss of localization and globalization of content; and biases that can reinforce stereotypes that affect inclusivity of organizational processes.

**Recommendations** – Reconsider roles and incentives across the organization. Update publishing operations with relevant AI tools; train employees and managers how to commission reports, write and peer review in a modern age. Build organizational awareness (familiarity with generative AI and its use cases; tools (selecting which generative AI tools to use). Review funding (to support generative AI usage). Address organizational risk due to privacy, legal, security and content accuracy concerns.

### INDIVIDUAL REPUTATIONAL RISK

Individuals can be exposed to accusations of plagiarism, copyright infringement, bias and fairness issues, misinformation, inaccuracies, privacy infringement and violations of data protection guarantees.

**Risk** – Relying solely on AI for content creation can affect the authenticity of the content.

**Recommendations** – Instill human oversight to ensure that content aligns with the organization's values, voice and intended message. Create policies and mechanisms that include requiring the author to validate information and fact-check, request a review for bias and ensure originality scores are at or below the organization's threshold.



**Figure 15** Deepfakes in investment fraud AI-generated clone of Ratan Tata raises concerns in India



An AI-generated clone of Ratan Tata raised concerns in India, as this leading Indian businessman was cloned to lure unsuspecting investors to fund fictitious business projects.

Video-generated scams, or deepfakes, are being used to attract investors. High-level government officials and businesspeople are finding their images repurposed for criminal uses. Business support organizations need to raise awareness to fight these practices, which affect trade and business development.

Scamming investors has long been an unwanted side effect of digital communications. These scams initially appeared in e-mails, and now they arrive via WhatsApp. People are encouraged to block and report such content.

Yet, deepfakes have already found applications in the business and marketing world. Businesses are using deepfakes for personalized advertisements, virtual engagement and product demonstrations.

The ethical component and privacy must be integral parts of the integration of AI in any business model.<sup>15</sup>

Source: Authors and Boom, 2023.

## ORGANIZATIONAL REPUTATIONAL RISK

When organizations use AI for content creation, significant risks include legal and compliance risks, brand consistency and reputation, ethical concerns and bias, and quality and accuracy control.

**Risks** – Reputational damage, diminished trust, ethical violations and backlash against bias.

**Recommendations** – It's easier than ever to find answers to questions. Make publications useful to those businesses and trade communities they serve. We recommend annual needs assessments among clients at large, rather than specific projects or programmes. Focus both on AI needs and publishing areas of interest. Develop strategies that encompass legal compliance, ethical considerations, robust content quality-control measures and human oversight to verify information, rectify errors and involve subject-matter experts in a heightened peer review process.



## Smart business approaches to using AI

- **Develop AI literacy:** Enhance technical expertise in AI that includes data analytics, embedding AI for improved organizational efficiency, and develop AI solutions that include a common set of editorial tools for data visualization, video creation and speech-to-text.
- **Use AI strategically:** Develop a strategy for using AI products and services in the business for internal efficiency, customer engagement and marketing, best use of AI tools for research, writing and promotion.
- **Plan content:** Create an internal AI communications plan for research, content creation, dissemination and promotion. Invest in specialist audiences, focus on solutions for major issues, delve into multimedia publishing.
- **Tell human stories:** Data visualization and streamlined video creation tools are exciting applications for economists, trade experts and other professionals to authentically touch business audiences.
- **Be accurate:** Ensure truth by fact-checking anything written internally and externally. Adopt a review system to ensure that employees monitor what goes into and emerges from use of AI-embedded products and services. Understand that AI content can be out of date.
- **Ensure understanding of AI tools:** Develop a training and awareness plan for all employees to understand the uses and limitations of AI.
- **Exemplify trust:** Prioritize ethical use of AI to build a brand that customers trust, avoid intellectual property infringements and protect the reputations of individuals and organizations.
- **Be transparent:** Build transparency and credibility by stating your AI strategy when working with partners, funders and clients.
- **Be relevant to non-U.S. markets:** Encourage development of AI products and services that address non-U.S. market needs and reflect developing country perspectives and culture. Manage biases by using global datasets.
- **Ensure legal protection:** Be aware of and press for national laws that protect citizens, data and privacy, ensure transparency and bring oversight to AI systems.

## Managing AI-related change

Like a genie trapped in a bottle, information was once contained in books and tightly controlled by newspapers and television.

Then the Internet was launched 50 years ago as a way for government researchers to share information – 534 years after Gutenberg created his printing press. Now anyone can publish their ideas, opinions and experiences. The power of AI tools in publishing is not new, but this latest wave has unleashed unprecedented promise and peril.

As AI becomes pervasive in all aspects of business, its influence will be transformative. We hope this report has been of service to kick-start planning to integrate AI responsibly, while keeping people front and centre. We hope you will consider:

**The human perspective.** How can we use the powers of AI to tell our story and the stories of others – from our own perspectives and in our own voice? What are the best ways to bring original content and analysis with empathy? What skills and training are needed for those who will be displaced by AI? Are we reflecting the biodiversity of humanity in our publishing choices?

**The organizational perspective.** Will organizations prioritize uniquely human work that AI cannot do: convening thought leaders, working with like-minded organizations for systemic change, mentoring young entrepreneurs, bringing new skills to SMEs? How will organizations decide on the use of AI tools in building a unique yet trustworthy brand? How can they build AI literacy? What training and incentives are needed to adopt AI tools efficiently and ethically? Are companies and institutions bringing the right groups together to discuss funding and priorities for content creation, in an AI era? How will these decisions be reflected in the reports they publish and other content that they create?

**The strategic perspective.** AI cannot build strategic partnerships, identify good practices and determine how to quickly scale up what works to achieve a far wider impact.

Let AI create a more elegant email, contribute to brainstorming, summarize long text, organize references, speed up graphic searches and translation – so that staff can spend more time to evaluate new approaches, engage with experts, formulate trade and business strategies or recommend policies.

We need strategic and ethical management of AI tools that align with human values and creativity.

### Creating content with AI tools

For small firms and business support organizations

#### HUMAN PERSPECTIVE

**DIVERSE**  
promotes developing countries, multilingual, gender-sensitive

**ORIGINAL**  
prioritizes storytelling and analysis

**CARING**  
addresses AI job displacement

#### ORGANIZATIONAL PERSPECTIVE

**INCLUSIVE**  
creators, communicators, experts

**EFFICIENT**  
saves time, money

**SAFE**  
protects reputation, intellectual property

#### STRATEGIC PERSPECTIVE

**SCALES UP**  
solutions for small firms in trade

**TRUSTED**  
factual, relevant, ethical

**PARTNERSHIPS**  
for funding, content, outreach



THOUGHT LEADER

## Frédéric Ballenegger

Deputy Head of Communication at the Permanent Mission of Switzerland to the United Nations in Geneva

# How to restore trust

**A political scientist by background and a communicator by vocation, Frédéric Ballenegger spent 20 years in the United Nations system – in West Africa, the South Pacific, Central Asia, New York and Geneva – working on knowledge management and virtually all aspects of digital communication before joining Swiss Foreign Affairs in 2022.**

Generative artificial intelligence is generally associated with massive productivity gains. Indeed, it allows automated tools to achieve a remarkably accurate transfer of knowledge. But it also has a dark side, including deepfakes – images and videos created by a machine following a prompt.

Deepfakes became part of the mainstream thanks to decentralized software distribution and cheap computer processing power. These impeccable forging techniques became available to anyone – and for any purpose, which could include irreversible damage to the reputation of a person or organization.

Taken out of context, and if not flagged as such, deepfakes could pass for visual and intuitive proof that the Earth is flat, that birds don't exist or that climate change is a hoax. For businesses, a narrative can become a rumour, leading to permanent reputational damage.

If anyone, anywhere, can prove anything, there is no truth. This would be the end of the Age of Enlightenment, where proof and the scientific method were the source of truth. We would be entering an age of knowledge bubbles; our public space, our common ground for dialogue, could shrink dramatically.

In parallel, social media, used by many young people as their primary source of information, also lead to a new relationship with truth. Social media algorithms profile their users, then preselect contents that match what users have looked at in the past. This circular exposure mechanically leads to a reinforcement of opinions and beliefs, perhaps at the expense of distance or objectivity. The so-called polarizing effect of social media leads to knowledge bubbles. This is now well documented, but policymaking has so far, by and large, fallen short of dealing with it.

If combined, the polarizing effect of social media and the disappearance of proof could lead to difficulties in building societies based on a common middle ground.

There are multiple sources of anxiety in our time (the climate crisis, conflicts, competition for natural resources and many more). Against this backdrop, with the individual citizen feeling able to do very little to tackle these global issues, denial is a frequent coping strategy.

It is very tempting to adopt alternate versions of reality as a protective reaction. Doing so, and adapting facts when they don't match the new story, was Arthur Schopenhauer's definition of madness.

Are there rays of hope in this grim panorama? Yes. There is a growing appetite for trusted and authoritative voices nurturing the constructive co-creation of solutions. Impartial multilateral organizations and journalistic platforms have a crucial role to play in making science accessible, in providing cross-checked news and in restoring trust.

The Swiss Government supports a journalistic platform named Geneva Solutions<sup>1</sup> to cover the remarkable work accomplished by the 40+ international organizations hosted in Geneva, including ITC. This platform relies on ethical principles to cover the diplomatic, scientific and technical work accomplished by Geneva, the city that works for the world.

Switzerland also supports DiploFoundation,<sup>2</sup> a think tank that explores the many opportunities AI offers to deliver more efficiently on the mandate of United Nations organizations. DiploFoundation provides pilot tools and engagement rules for artificial intelligence. In addition, Geneva hosts the CyberPeace Institute,<sup>3</sup> a non-governmental organization offering free cybersecurity assistance, and the Geneva Center for Security Policy,<sup>4</sup> which includes a division on emerging risks, including in relation to AI.

Together with the cybersecurity centre of the World Economic Forum,<sup>5</sup> the Geneva Science and Diplomacy Anticipator<sup>6</sup> and the International Telecommunication Union,<sup>7</sup> these organizations constitute a striving ecosystem of academic excellence and diplomatic activity. Geneva-based organizations are already tackling AI dilemmas from their different perspectives, from intellectual property and information and communication technology standards to human rights to data for science and development: Geneva is now the natural locus of the international governance on these new issues.

## How to use AI responsibly

Ethical principles<sup>8</sup> that international organizations consider for AI are equally relevant to small businesses and the organizations that support them. To build trust and a trustworthy brand, these abridged guidelines can help:

- **Human oversight:** Always have someone check what the machine says.
- **Transparency:** Anything AI-generated must be labelled as such.
- **Explainability:** Link content to its sources (for example, ensure that answers provided by a robot on a website include sources used by the machine).
- **Proportionality:** Use AI when it gives a competitive advantage, but make sure you have the resources for human oversight of contents generated.
- **Do no harm:** Prevent any bias in AI-generated content.

'In no other field is the ethical compass more relevant than in artificial intelligence,' said Gabriela Ramos, Assistant Director-General for social and human sciences at the United Nations Educational, Scientific and Cultural Organization. This immensely powerful tool could boost sustainable development, dialogue, diplomacy, international cooperation, tech literacy and many other dimensions of a better world – if used wisely.

*'If anyone, anywhere, can prove anything, there is no truth.'*

*'There is a growing appetite for trusted and authoritative voices nurturing the constructive co-creation of solutions... and in restoring trust... Geneva is now the natural locus of the international governance on these new issues.'*

1 [genevasolutions.news](https://genevasolutions.news)

2 [diplomacy.edu](https://diplomacy.edu)

3 [cyberpeaceinstitute.org](https://cyberpeaceinstitute.org)

4 [gcsp.ch](https://gcsp.ch)

5 [centres.weforum.org/centre-for-cybersecurity](https://centres.weforum.org/centre-for-cybersecurity)

6 [gesda.global](https://gesda.global)

7 [itu.int](https://itu.int)

8 See [unsceb.org/principles-ethical-use-artificial-intelligence-united-nations-system](https://unsceb.org/principles-ethical-use-artificial-intelligence-united-nations-system)



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THOUGHT LEADER

## Mathilde Tachon

Program Officer within the IP for Business Division of WIPO

# IP for businesses in an AI-driven world

**An IP lawyer for seven years before joining WIPO, Mathilde Tachon now leads initiatives supporting SMEs and startups in scaling their operations through strategic utilization of the IP system in an ever-evolving landscape.**

SMEs are the backbone of national economies, accounting for 90% of all businesses and more than 50% of employment globally.

In today's rapidly evolving landscape, frontier technologies, including AI, are integral to companies of all sizes and sectors. Product development, design, manufacturing, marketing, accounting and customer management are just a handful of examples in a world in which almost every step we make involves, in some way, software, data and machine learning encounters.

The AI market is projected to reach \$191 billion this year, while patent applications in the AI field climbed a remarkable 718% between 2015 and 2020,<sup>1</sup> with machine learning dominating AI techniques.<sup>2</sup> From groundbreaking projects, such as OpenAI, to applications in smart indoor farming, image and speech recognition technologies, and autonomous vehicles, AI is driving transformative developments in the business landscape.

The global adoption rate of AI by businesses has increased steadily, reaching 35% of surveyed firms in 2022,<sup>3</sup> according to studies by IBM. Similarly, in 2023, 38% of measured enterprises reported actively implementing generative AI.<sup>4</sup>

1 [https://www.wipo.int/about-ip/en/frontier\\_technologies/frontier\\_conversation-copy.html](https://www.wipo.int/about-ip/en/frontier_technologies/frontier_conversation-copy.html) and <https://www.wipo.int/edocs/pubdocs/en/wipo-pub-944-2022-en-world-intellectual-property-report-2022-the-direction-of-innovation.pdf>

2 WIPO Tech Trends AI 2019. [https://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_1055.pdf](https://www.wipo.int/edocs/pubdocs/en/wipo_pub_1055.pdf)

3 IBM Global AI adoption Index 2022. <https://www.ibm.com/downloads/cas/GVAGA3JP>

4 <https://newsroom.ibm.com/2024-01-10-Data-Suggests-Growth-in-Enterprise-Adoption-of-AI-is-Due-to-Widespread-Deployment-by-Early-Adopters>

## Complex questions: Inputs and outputs

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Despite AI's potential, its implications are unclear, raising complex questions.

This transformation brings IP to the forefront, as one key legal mechanism regulating resources that are used as inputs or produced as outputs to exploit AI technologies. Main concerns revolve around ownership of AI-generated works, the use of copyrighted content in training data and potential IP infringements.

### PROTECTED 'INPUTS'

Inputs, whether they constitute the content used in training data or serve as prompts (e.g. chat input or images), may fall under the protection of IP rights.

Consider AI generative tools trained on the paintings of Picasso to generate similar-style images. As copyright safeguards the original paintings, two questions may arise. First, under which circumstances (if any) is the use of copyrighted art works for AI training purposes considered an act that requires authorization and payment of royalties to the copyright owners? Second, under which conditions (if any) would generated images resembling these artworks be considered as infringing upon the artist's copyright, if this use was not properly licensed or authorized?

Another scenario touches on text generators. They increasingly demonstrate proficiency in replicating the style and structure of authors' writing when trained on various sources, including freely accessible online content. Here, too, the same question arises. Large foundation models, trained on the entire public internet, introduce serious questions about the legality of using data, even if these are accessible from the internet.

There are also inquiries into whether users should be free to prompt these tools with direct references to copyrighted works or trademarked logos, without obtaining prior permissions from the rightful owners.

Training data concerns extend to the use of open-source codes that may violate applicable open-source licences. Hence, when considering the IP aspects related to using AI platforms, it's essential to understand that AI technologies both rely on and/or generate software, which itself is subject to IP protection.

Therefore, before using the platform, the terms of services and licensing agreements should be carefully considered. For instance, are users automatically transferring ownership of content used in prompts to the platform provider?

Users could also inadvertently compromise the novelty of an invention eligible for patent protection or jeopardize information confidentiality that qualifies as a trade secret, by inputting such data into these tools.

### OUTPUTS RAISE QUESTIONS, TOO

Where does one draw the line between purely AI-generated outputs and such that the human creative contribution suffices to classify it as an original work of authorship?

This question is raised, for instance, by the interpretation of Vermeer's portrait *Girl With a Pearl Earring* generated by Julian van Dieken through Midjourney (titled *A Girl With Glowing Earrings*) and on view in The Hague's Mauritshuis museum.<sup>5</sup>

Determining the rightful owner might be complex. Should it be the user who initiated the AI generation, the developer of the AI tool, these two together or other potential contributors?

As a practical matter, the contractual dimension is pivotal.

AI applications operate under specific contractual frameworks that dictate the rights and responsibilities of users. This contractual governance is crucial to define ownership rights of users. Platforms such as Midjourney, operating as open-by-default communities, allow shared access to generated content, affecting considerations for copyright and other protections (like design and trademark rights) for businesses using such platforms.

5 <https://news.artnet.com/art-world/mauritshuis-museum-girl-with-a-pearl-earring-ai-facsimile-2263100>

## Managing risks: Legal uncertainty with heterogenous national approaches

Businesses, especially those that operate globally, should carefully manage their encounters with generative AI, fully understanding legal uncertainties and their implications. Like IP rights themselves, these issues require careful analysis on a country basis to ensure compliance with local laws and regulations.

### USING COPYRIGHTED INPUTS FOR AI TRAINING

In the United States, the question is whether such use falls under the fair use exception. In the past, the fair use defence allowed activities – such as the scanning of books by companies such as Google – for data-retrieval purposes.

Some argue that by analogy, similar use of copyrighted works, for data model training, may be found to be legal, if performed in the United States. Others may argue that copyright owners should at least be compensated for using their works as inputs for commercial for-profit uses.

The European Union, Singapore and Japan have adopted exceptions for text and data mining that vary in scope. Singapore has adopted an exception, applicable to commercial uses without limitation on purposes (e.g. research), and prohibiting contractual exclusion or modification, provided there is lawful access.<sup>6</sup> In the European Union, under the Directive on Copyright in the Digital Single Market, exceptions extend to commercial entities, though copyright owners can opt out through contractual provisions.<sup>7</sup>

In a February ruling, the Guangzhou Internet Court held the operator of a generative AI service directly responsible for copyright infringement due to its provision of AI-generated text-to-image services (specifically pertaining to the unauthorized use of Ultraman images).<sup>8</sup>

### COPYRIGHTS FOR AI-GENERATED OUTPUTS

Perceptions differ regarding the level of human intervention, creative intent and contributions required for copyrighting an AI-generated work. The examples below of distinct legal methods underscores divergence across jurisdictions.

In the United States, purely AI-generated works do not receive copyright protection, irrespective of the length or complexity of the prompts used. In a recent case, Jason Allen's registration for *Théâtre d'opéra spatial* was denied due to perceived lack of genuine control over the AI's artistic choices, despite using 600 prompts in Midjourney and further processing of the work. This means, however, that copyright protection may still be granted if a human can demonstrate that a meaningful amount of creative contribution was put into the final content.

Conversely, in a similar case, the Beijing Internet Court recognized an AI-created image as copyrightable. The court deemed the plaintiff's significant involvement in selecting more than 150 prompts, arranging their order and setting parameters as sufficient human input for copyright recognition.

Furthermore, a few jurisdictions around the world, including the United Kingdom, provide express protection for computer-generated works without a human author. In this case, the 'author' is the person who made the necessary arrangements to create the work.

<sup>6</sup> Sections 243 and 244 of the Singapore Copyright Act.

<sup>7</sup> Article 3 and article 4 of the DSM Directive.

<sup>8</sup> *CLA v AI Company* Guangzhou Internet Court 02082024: The court rejected the defendant's argument that it should not be held liable as it had contracted with a third-party provider that provided the generative AI service, because the Interim Measures for the Administration of Generative Artificial Intelligence Services require parties that offer such services to take certain precautions, which the defendant did not do (full decision with translation here: <https://archive.org/details/scla-v-ai-company-guangzhou-internet-court-02082024-with-english-translation>).



## Q&amp;A

**Q.** What should a business keep in mind when using genAI tools?

**Leverage AI tools** to identify digital content, including plagiarism detection. AI tools can help monitor and address potential infringements.

**Maintain clear evidence of IP protection**, such as comprehensive records for copyrights, to enforce legal claims. Implement terms of use on websites to prohibit scraping. Review platform terms when posting original content on social media platforms or websites. These are essential to reserve one's ability to assert copyright ownership.

**Document the creation process and human involvement in prompts to seek IP protections such as trademarks, patents or copyrights.** Whether protection is granted is determined on a jurisdiction level and case-by-case basis, as well as on contractual frameworks. Nevertheless, documentation and recordkeeping of human contribution is important.

**Ensure that internal and external stakeholders are aware of confidential information not to be used as prompts in AI tools** (such as clients' data). Determine ownership rights of AI-generated work in advance with all parties such as employees, or external providers including designers.

**Verify with AI providers if the AI models were trained using copyrighted content**, to fence exposure to liability for infringement claims. These providers should confirm that the training data and software components were properly licensed or are otherwise lawfully used.

**Conduct thorough checks to ensure AI-generated outputs do not infringe third-party IP rights** before use. Exercise caution when generating text or images to avoid reliance on existing copyrighted materials

**Q.** What if businesses decide to develop genAI tools themselves?

There are IP actions that mitigate risk.

**Scrutinize contractual terms for data used to train AI tools**, ensure compliance and obtain proper authorization for the use of training data.

**Establish rules and contracts with third parties** for data used, such as artists, image library owners and database owners.

**Analyse the legal framework surrounding publicly accessible internet data**, recognizing IP protections and limitations on its use for AI training. This extends to use of open-source software licences, particularly if the tool generates suggestions that closely resemble code from public repositories without appropriate attribution.

**Maintain records** to demonstrate safeguards against IP infringement by the AI system and validate the provenance of generated content. AI technologies rely heavily on software, which itself is subject to IP protection and typically copyrightable when created by a human (with exceptions in very few jurisdictions). Documenting the creation process is essential to secure copyright protection for this software.

**Q.** What is WIPO doing to help SMEs to navigate the new landscape of AI?

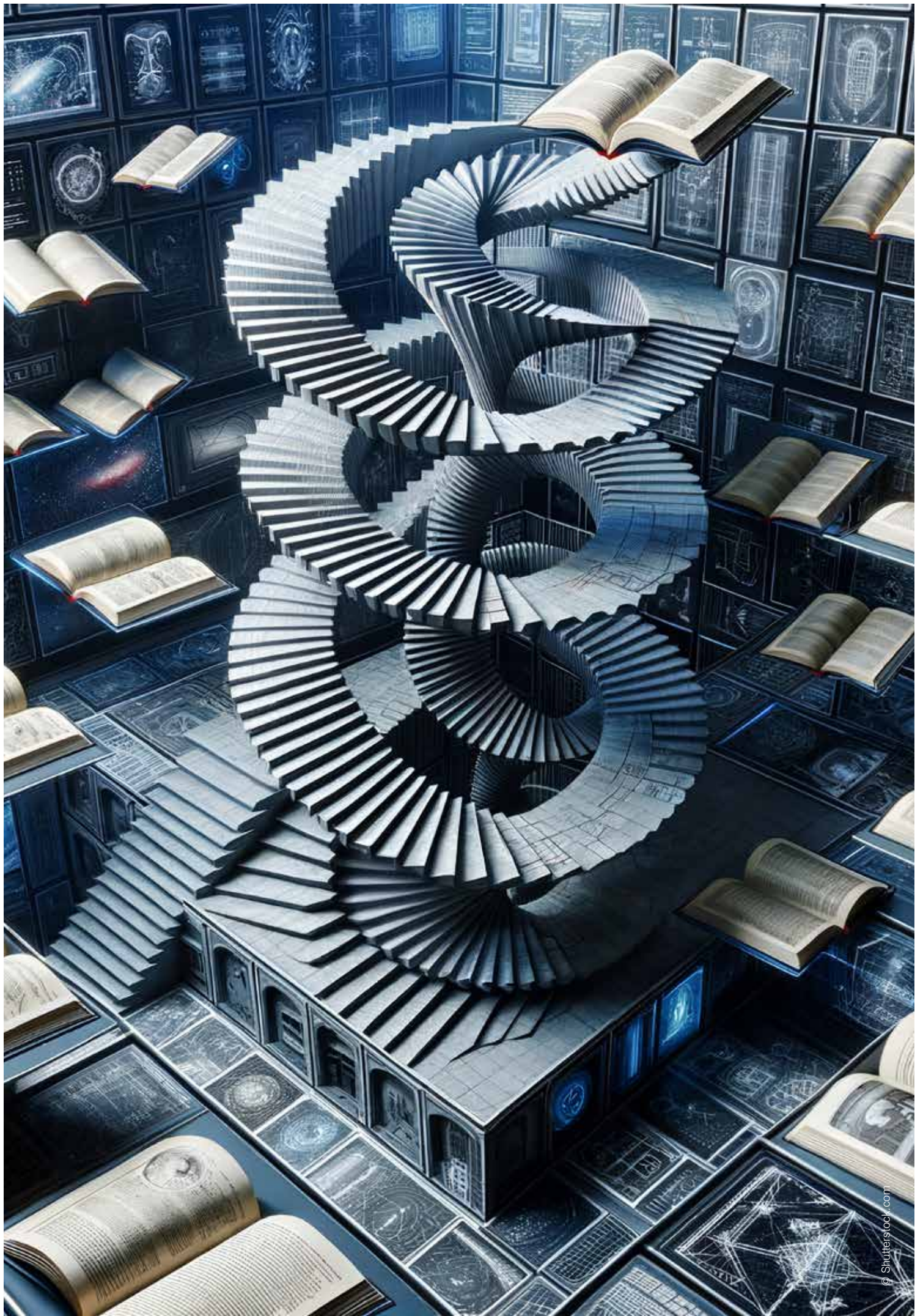
As Marco Alemàn, Assistant Director General of the IP & Innovation Ecosystems Sector of WIPO, notes: 'Digital general-purpose technologies are leading the way for the future of innovation. The growth of these technologies far surpasses those of past breakthrough technologies, such as the steam engine, and ICT. Moreover, AI is a new way of creating and producing ideas, which have an important role in increasing the productivity of innovative effort.'

In light of these advancements, 'WIPO is equipping businesses with the skills and knowledge to navigate the IP toolbox in an AI-driven world. This includes our IP Management Clinics programme and materials that enhance understanding of IP management within the context of AI, to empower businesses in this dynamic field.'

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#### WIPO Resources: IP and AI convergence:

- IP for Business: <https://www.wipo.int/sme/en/>
- WIPO Technology Trends: [https://www.wipo.int/tech\\_trends/en/](https://www.wipo.int/tech_trends/en/)
- IP and Frontier technologies: [https://www.wipo.int/about-ip/en/frontier\\_technologies/](https://www.wipo.int/about-ip/en/frontier_technologies/)
- Toolkits and factsheets: [IP Policy](#), [Economic Perspective](#), [genAI](#)



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## APPENDIX I

### LAYPERSON'S GUIDE: HOW AI SYSTEMS WORK

AI systems use machine learning tools that are supervised or unsupervised. Supervised ones are given an input and generate an output based on an initial configuration that may have little to do with the data being processed. The initial output may be bad. The supervisor 'trains' the tool by comparing the desired output with the existing output. This defines the 'error' that is fed back into the system. The system generates a new output that takes the error into account. This is repeated until the trainer thinks the tool is sufficiently precise. There is usually still a margin of error. Unsupervised systems find patterns within data that have not been labelled or categorized. In other words, the underlying algorithm learns patterns without explicit instructions on the outcome.

Translations compare large amounts of text in two languages. The system guesses the translation based on the statistically most probable answer from texts it has been fed. Text generation uses the same approach. Based on the training text and words a user has already written, it guesses the next most probable word. These systems need to be trained to minimize errors. But a rule-of-thumb is that adding 10x the data overwhelms algorithms devised to reduce error. With lots of data, the system gets better.

Large language models carry out this process on a larger scale. For text, they take websites, books and other content and generate probable answers. Rather than generating words, they generate entire passages. These are a mashup of the most probable collection of words from the texts they have been given.

Image and video generation are similar. They use pattern recognition to match an output to an input and minimize the error. If one takes enough Van Gogh paintings and trains a system on them, it guesses things that are the style of Van Gogh. If one then put in a separate picture, it can merge that with its Van Gogh style and create a mashup. Or, if it has been fed pictures of tables, it can create a table in the style of Van Gogh and its own mashup.

The artificial 'intelligence' is based on pattern matching, with compute power that was not available 10 years ago and is far less than what will be available in another 10 years. The scope of these models – which have billions of internal knobs that are being tuned and ingest billions of documents – makes them difficult to understand and predict and raise policy and ethics questions along the way.

## APPENDIX II

### SURVEY – BUSINESS SUPPORT ORGANIZATIONS USE AI TOOLS IN PUBLISHING

In December 2023, the International Trade Centre contacted 800 business support organizations including chambers of commerce, trade promotion, investment and sector associations, and government ministries. Of the 73 (in 39 different countries) that responded (9% of respondents), 77% were male; 20% were under age 35; 48% were aged 35 to 50; and 32% were over age 50. Only six were from developed countries.

Developing countries numbered 67 respondents and developed countries had 6 respondents.

#### USE OF CHATGPT AND SIMILAR AI TOOLS

- Developing countries: Yes: 33 No: 34
- Developed countries: Yes: 5 No: 1

##### Developing countries cited:

- Prediction and modelling scenarios
- Search for examples of code (Python, PHP, etc.)
- Provide advice on programming logic in specific study domains
- Idea and CV generation
- Research (with further verification of data)
- Assistance to compose articles, memos, letters, social media posts and generate tables
- Translation
- Business planning, marketing and reporting
- Presentation support (such as for AI applications in a chamber of commerce)

##### Developed countries cited:

- Summarize complicated text (and then finetune the result)
- Generate a list of export barriers for SME
- Email quick replies, social media posts, company website copywriting, supplementary elements in studies and reports
- A first overview on complex questions with complex web searches

Those who answered 'Yes' to using AI or ChatGPT in daily work provided these brief examples.

I use AI to generate scenarios and simulations that can predict outcomes and apply the outcomes to solve problems or improve my work.

I am using AI for modelling situation scenarios to solve problems and help me in forecasting.

I'm personally using ChatGPT to search for code examples and explanations of how to use functions in programming languages such as Python and PHP, and tips on programming logic in specific fields of programming; create presentations, develop talks in specific fields (e.g. use of AI in a chamber of commerce); and write administrative response letters. My response was translated with DeepL.com (free version).

We use it for research and to summarize texts.

#### USAGE RATINGS

Users were asked to rate their experiences on a scale of one to five, with five being most favourable. We grouped the responses below into: Very favourable (4-5); Medium (3); Not favourable (1-2).

##### Developing countries:

- Very favourable: 20
- Medium: 17
- Not favourable: 25
- No response: 5

##### Developed countries:

- Very favourable: 4
- Medium: 1
- Not favourable: 1

Multilingual translation of working documents
E-mails, reports, social media and so many areas
Draft terms of reference
Grammar check and financial information
World trade news and analysis
I only use it occasionally.
I use it more for research.
Asking questions, research and fine-tuning content
I utilize ChatGPT and other AI tools for communication, business planning and marketing.
For rephrasing and summaries of my writing
To get some hints on a new topic
For research purposes, generation of text and tables, summarize a long text, etc.
Generate a list of barriers for SMEs when exporting
Composing articles, letters, press release and posts, and advice on strategies
Analysis and review of texts with board input
Summarize complicated text and then fine-tune the result
Since data with ChatGPT have not been updated since January 2022, it is not possible to obtain updated information in the data and foreign trade section. Therefore, it is highly recommended that marketers and trade departments utilize other trustworthy sources to gather information.
Finding information
I use it every day to assist me in my work.
It helps write memos and letters on most topics.
I use it to obtain concise knowledge and understanding of a specific topic. However, verification is crucial, particularly regarding figures and data.
Using for reports, information analysis
We use ChatGPT to e-mail quick replies, write social media posts, generate copy for the company website and provide supplementary elements in studies and reports.
For reporting, collecting ideas, developing a resume and more
To receive an overview of complex issues and to summarize complex web searches
I use ChatGPT for speeches, press releases and other letters shared with members.
I use it in paraphrasing reports.
To write social media copy, letters in other languages and extract main ideas from voluminous texts

We use it for better forming of text, proof checking, brainstorming and specific facts.
I'm researcher so we need to search new topics.
When there is need to research on a topic or phenomenon, I enjoy using ChatGPT or Bard to receive a more specific answer or background. I also use it for idea generation.
Not used often, but sometimes I use it for reporting.

They also shared questions, comments and concerns.

ChatGPT and other AI tools have tremendous potential in the writing of any content (books, newspapers, magazines, journals or other forms of printed or digital media, etc.). Content editors can use it to produce quality content. However, one must remain vigilant and make sure of the legitimacy and reliability of the information before using it, as AI also facilitates the work of certain malicious actors who disseminate false information in several formats (text, video, etc.). To remedy this, it is advisable first to look at the legitimacy of the source of the information and if it is not suitable, proceed to cross-check the information.
It's used to create pictures, research text and makes project writing easy.
The use of AI and ChatGPT represent plagiarism in my eyes instead of a professional production.
We need more awareness training and more information sharing on usage, and how it could improve our responses and business communications.
Privacy concerns
Considering that artificial intelligence receives data from the internet, it may have many errors.
How do I best phrase questions [prompts], and how can I use ChatGPT to make my job easier?
The accuracy of information is a concern.
What is ChatGPT and how will it benefit my organization?
Plagiarism and duplication are my concerns.
Intellectual property infringement
It is a good AI tool, but people should not depend on it as it will decrease the capacity of the writing.
I believe that ChatGPT and other AI tools are great tools that have the potential to revolutionize the way we interact with technology. These tools can help us automate tasks, improve our productivity and efficiency, and even enhance the accuracy of our work. Additionally, AI-powered assistants like ChatGPT can provide helpful suggestions, answer our questions and offer guidance when we need it. Overall, I think the benefits of AI tools are significant, and I am excited to see how they will continue to evolve and shape the future of technology.
AI is a positive tool if used properly and ethically. I think those not using AI will be left behind.
We have had training for this, but it was short. I'd like to try it out from next year onward as it sounded like it really makes things easier and more efficient.
Is it a good idea to use ChatGPT or any other AI tools in every aspect of our work? How far can AI tools be used in our daily work, especially for publishing? How can I systematically check whether a publication has been written using an AI tool?
ChatGPT is used mainly for rewriting text. The performance is not there (yet) for other AI tools.
The inclusion of false or 'hallucinated' information

We are more agile and productive with the tools.
ChatGPT has been trained mainly with non-industry data in Wikidata. The next evolution phase will require product data and approaches, like the CEN/CENELEC DPP work group will work on in their semantical part of their work. To generate this cross sector will not be easy, but an important prerequisite for the wish of the EU commission to support customs and surveillance authorities (legislation as they call it) with 'cross-sectoral ontologies' within the DPP data, as the call this for AI support. This will require, in my opinion and other experts agree on this, sector-specific 'classification schemes with defines defined semantics'. If you want to understand better, have a close look at SPARQL tutorials in YouTube.
I am not an expert in this field, and I have no knowledge of the algorithms used in them, but I imagine that international organizations, especially ITC, can use artificial intelligence to improve market data tools and many other tools. Currently, ITC sources for information are largely authorities or official organizations in countries or international organizations. In my opinion, this can be expanded. Currently, there are many international indicators and resources in economic sectors, including competitiveness, logistics, corruption, economic performance, ease of doing business, entrepreneurship, etc. – these are sources that can be used in market analysis with the help of artificial intelligence. In my opinion, soft economic capacities such as management, connection with the global economy, national brand, etc. are much more important than hard economic capacities such as underground resources and location of country. Today, a political action by (a country) against (another country) has caused it to face extensive sanctions. Yet ITC's export potential tools based on its methodology still considers \$90 billion of untapped potential for this country!
How can I improve my use of ChatGPT?
I think it is OK and improvements can be made.
It's new; we are just starting to understand its importance and usage.
Verification is must because it provides answers to my question from data available on internet. Proper training and tutorial regarding usage of AI will be helpful.
Our main concern is the veracity of the information. As our country's trade promotion organization and investment promotion agency, we are responsible for the information published under our banner, so we are very careful not to publish from sources that cannot be accurately certified.
Not very relevant yet
ChatGPT can be considered as a tool or a source of information. As a tool for processing your own or dedicated knowledge sources, it can be very useful and accelerate work, but as a source, it can give unreliable results. After all, credibility is the basis of our work, isn't it?
AI is a gain of time, a new assistant and a new translator.
We sometimes use generative AI to generate a draft brief on a topic. However, results must be checked and edited by an expert. I prefer using other tools than ChatGPT which rely on more actual web data.
From what I have seen, some concerns around areas such as assumptions and different scenarios for growth and how these are interpreted – but I have limited direct experience in this realm.
ChatGPT gives good content for publication, but one would have to verify the source of information to ensure accuracy in source.
It's a very good assistant that reduces time and increases productivity.
It is better for new learners, and it helps in many fields regarding official work.
I tried to ask some questions and answers were irrelevant! I never used it again.
Not used often, but sometimes I use it for reporting.



## APPENDIX III

### USING LARGE LANGUAGE MODELS FOR RESEARCH

ChatGPT and other LLMs offer a structured research framework by guiding users through steps tailored to specific research needs. Use this general guidance when working with LLMs – as you would with traditional publishing practices. AI-powered tools serve the same basic content creation steps.

**Define the objective.** What question do you want to answer, or what problem do you need to solve?

**Gather information.** Use the browser tool to search for information on the topic. Identify keywords, find scholarly articles, books or reliable online sources.

**Evaluate sources.** Assess the credibility of the sources. Look for peer-reviewed articles, books from reputable publishers and websites known for their factual content.

**Organize information.** Sort the gathered information by relevance and reliability.

**Analyse.** Look for patterns, contrasts and connections in data. Consider different perspectives and how they contribute to understanding the topic.

**Formulate insights.** Develop insights based on the analysis of LLM data. Use formats such as SWOT analysis (strengths, weaknesses, opportunities, threats) or challenge-solutions-response to guide insights.

**Communicate findings.** Present research in a report in ways that reach online audiences.

**Cite sources.** Attribute all research sources to give credit to original authors and strengthen credibility of your report.



## APPENDIX IV

### CHATGPT: A GUIDE TO DEVELOPING PROMPTS

It's always helpful to ask the right questions, and AI machines are no exception. Questions are called prompts, and learning to master prompts requires attention. This set of tips, which we found on LinkedIn, was provided by one of the authors of this report.

# ChatGPT Prompting Cheat Sheet

**Use this Cheat Sheet to master prompting**

<p style="text-align: center; margin: 0;"><b>MODES AND ROLES</b></p> <p><b>Intern:</b> Find research on [insert topic]  <b>Idea generator:</b> Generate ideas on [x]  <b>Editor:</b> Edit and fix this text: [insert text]  <b>Teacher:</b> Teach me about [insert topic]  <b>Critic:</b> Critique my argument: [argument]</p>	<p style="text-align: center; margin: 0;"><b>FORMAT</b></p> <table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Code</td> <td style="padding: 2px;">Table</td> <td style="padding: 2px;">Essay</td> </tr> <tr> <td style="padding: 2px;">Tweet</td> <td style="padding: 2px;">Blog</td> <td style="padding: 2px;">Report</td> </tr> <tr> <td style="padding: 2px;">Social media post</td> <td style="padding: 2px;">Email</td> <td style="padding: 2px;">Presentation</td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">Bullets</td> <td style="padding: 2px;">Research</td> </tr> </table>	Code	Table	Essay	Tweet	Blog	Report	Social media post	Email	Presentation		Bullets	Research	<p style="text-align: center; margin: 0;"><b>TONES</b> Write using [x] tone</p> <table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;">Firm</td> <td style="padding: 2px;">Professional</td> <td style="padding: 2px;">Persuasive</td> </tr> <tr> <td style="padding: 2px;">Confident</td> <td style="padding: 2px;">Descriptive</td> <td style="padding: 2px;">Formal</td> </tr> <tr> <td style="padding: 2px;">Poetic</td> <td style="padding: 2px;">Humorous</td> <td style="padding: 2px;">Informal</td> </tr> <tr> <td style="padding: 2px;">Narrative</td> <td style="padding: 2px;">Academic</td> <td style="padding: 2px;">Friendly</td> </tr> </table>	Firm	Professional	Persuasive	Confident	Descriptive	Formal	Poetic	Humorous	Informal	Narrative	Academic	Friendly
Code	Table	Essay																								
Tweet	Blog	Report																								
Social media post	Email	Presentation																								
	Bullets	Research																								
Firm	Professional	Persuasive																								
Confident	Descriptive	Formal																								
Poetic	Humorous	Informal																								
Narrative	Academic	Friendly																								

**HOW TO BUILD A CHAIN PROMPT WITH EXAMPLE**

1. **Insert first prompt:** Give me a summary of this document [insert or copy paste document text]
2. **Modify the output:** Use the summary above and write a 500 word piece that explains the topic to beginners
3. **Modify the tone:** Change the tone of the answer above and make it sound more professional
4. **Modify the format:** Convert the answer above into text for a presentation with 1 slide for each key point

<p style="text-align: center; margin: 0;"><b>PROMPTS FOR MARKETERS</b></p> <p>List [insert number] ideas for blog posts about [insert topic]              Create a 30 day social media calendar about [insert topic]              Generate landing page copy for [insert product description]              Write 5 pieces of Facebook ad copy for [product description]              Generate 5 persuasive subject lines for an email about [insert email description]</p>	<p style="text-align: center; margin: 0;"><b>PROMPTS FOR CODING</b></p> <p>Help me find mistakes in my code: [insert your code]              Explain what this snippet of code does: [insert code snippet]              What is the correct syntax for a [statement or function] in [programming language]?              How do I fix the following [programming language] code which [explain the functioning]? [insert code snippet]</p>
<p style="text-align: center; margin: 0;"><b>PROMPTS FOR SALES</b></p> <p>Generate 10 ways to generate leads for [product description]              Create a personalized sales email for potential customers. Include [topic, brand name, promo offers, etc.]              Write a sales landing page description for [product description]              Generate 5 personas I should include in my outreach for [X]              Generate a script to use when cold-calling [insert persona]</p>	<p style="text-align: center; margin: 0;"><b>PROMPTS FOR DESIGNERS</b></p> <p>What are some interactions to consider when designing a [insert app or website description]              Create a user persona for [describe product]              Generate 10 questions for a user interview regarding [topic]              Create a user journey for [insert app and persona description]              Generate UI/UX design requirements for [describe feature]</p>
<p style="text-align: center; margin: 0;"><b>PROMPTS FOR RESEARCH</b></p> <p>Identify the top 20 companies in [insert industry] by revenue              What are the top trends in [insert industry] for 2023?              Find me the best-reviewed software for [insert task]              Summarize the annual financial statement of [insert company]              Summarize this research paper and give me a list of the key insights: [insert research paper text]</p>	<p style="text-align: center; margin: 0;"><b>PROMPTS FOR CUSTOMER SERVICE</b></p> <p>Create a template for an email response to customers inquiring about [product].              What are the most frequently asked questions about [topic]?              Create a help page that explains how to use [your product].              Summarize the following knowledge base article to give step-by-step instructions: [insert article]</p>

**GENERAL PROMPTS**

Rewrite this text and make it easy for a beginner to understand: [insert text].  
 I want to [insert task or goal]. Generate 5 for ideas for [insert task or goal].  
 Explain [insert topic] in simple and easy terms that any beginner can understand.  
 Summarize the text below and give me a list of bullet points with key insights and the most important facts.  
 Proofread my writing above. Fix grammar and spelling mistakes. And make suggestions to improve the clarity of my writing.

<p style="text-align: center; margin: 0;"><b>10 Best Prompting Tools</b></p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="display: flex; gap: 5px;"> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">PromptDr/ve</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Geniea</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">CreativAI</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Public Prompts</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Prompt Perfect</div> </div> <div style="display: flex; gap: 5px; margin-top: 5px;"> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Promptist</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Maker Box</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Trickle</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">PromptBase</div> <div style="border: 1px solid white; padding: 2px 5px; border-radius: 5px;">Promptinterface.ai</div> </div> </div>	<p style="text-align: center; margin: 0;"><b>CREATED BY ZAIN KAHN</b></p> <div style="display: flex; align-items: center;"> <p style="font-size: 0.9em; margin: 0;">Join <a href="#">superhuman.ai</a> - my newsletter with <b>300,000+</b> readers that teaches you how to use AI. <a href="#">Link in post</a> 📌</p> </div>
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Reused with permission from Zain Kahn, Superhuman.ai

## APPENDIX V

### PROMPTS TO REVIEW WRITING

Here are some suggestion 'prompts' to have ChatGPT review writing:

- 'Edit the following text.'
- 'Read the following text and suggest changes for readability and understanding.'
- 'Highlight unclear or confusing sentences or paragraphs.'
- 'Suggest more appropriate wording that will make this document appear more professional.'
- 'Identify word usage errors and suggest more appropriate words or phrases if used incorrectly or awkwardly.'
- 'Create a 10-slide PowerPoint summarizing the following text.'
- 'Suggest content and images for a two-minute video that summarizes the following text.'
- 'Update and better organize the following document.'
- 'Reduce this 150-page document to 10 pages.'
- 'Summarize this article in no more than one sentence.'
- 'Highlight where messages are repeated in this document.'
- 'Show me a word cloud including the number of times a word appears – do not include prepositions, verbs, transitions, pronouns or conjunctions.'
- 'I have no education, training or experience in this technical subject. Tell me the top five key concepts in this document.'

Source: Authors.

## APPENDIX VI

### CHECKLIST: VERIFY YOUR SOURCES

Verifying the credibility of sources involves several steps to ensure reliability. Here are tips in a checklist:

**Check the author:** Look for information about the author's expertise, qualifications and background. Is he/she knowledgeable in the field being discussed? Google the name of the author to see if he/she has a history of credible work.

**Publication and publisher:** Assess the publication or website. Is it known for quality journalism or reliable information? Established newspapers, academic journals and reputable websites often maintain higher credibility.

**Publication date:** Ensure the information is current. Some topics evolve quickly, and outdated information may not be accurate.

**Cross-reference:** Compare information from multiple sources. If multiple credible sources verify the same information, it's more likely to be accurate.

**Citations:** Reliable sources usually cite their own sources. This transparency adds to their credibility. Check if evidence or references back the information.

**Bias:** Consider potential bias of the source. Look for balanced reporting that considers different viewpoints.

**Fact-checking:** Snopes, FactCheck.org and PolitiFact are examples of sites that verify the accuracy of claims and information.

**Peer-reviewed articles and reports:** Peer-reviewed content undergoes scrutiny by experts to ensure credibility.

**Domain analysis:** For online sources, analyse the domain name. Some mimic credible sources but alter the spelling. For instance, '.com.co' might appear similar to '.com' but can represent a different, often suspicious, website.

**Trustworthy URLs:** Websites with URLs that end in unusual extensions or contain random numbers or letters can be suspect. Official sites or respected news organizations often have simple, recognizable URLs.

*Source:* Authors and ChatGPT.

## APPENDIX VII

### DATA VISUALIZATION TOOLS

Several AI-powered tools specialize in generating visual summaries of written content. Some popular options include:

**Canva:** Known for its versatility, Canva offers templates and design elements to turn text-based information into visually appealing graphics, infographics or presentations.

**Lumen5:** Primarily designed for turning text content into engaging videos, Lumen5 uses AI to analyse text and automatically generates video summaries with relevant visuals, text overlays and animations.

**SummarizeBot:** This tool uses AI to summarize text content from various sources and can present the information in visual formats such as charts, graphs or summarized bullet points.

**Visme:** This platform allows users to create visual content, including infographics, presentations and reports, by inputting written information and transforming it into visually engaging summaries.

**WordsEye:** More focused on turning text into 3D scenes, WordsEye allows users to input descriptive text and generates corresponding visual representations using 3D modelling techniques.

**Zoho Notebook:** Zoho's Notebook AI creates visual summaries from text notes or written content, organizing information into visually digestible formats such as mind maps, flowcharts and more.

When using these tools, consider factors including the type of visual output you prefer (infographics, videos, diagrams), ease of use, customization options and the ability to accurately represent the essence of the written content.

*Source:* ChatGPT.

# REFERENCES AND ENDNOTES

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## REFERENCES

### AI IN PUBLISHING

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Writers have sued AI companies for using their work without permission to train their AI systems. The Authors Guild and others have filed petitions to seek approval before using writers' work for AI training.

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Artificial intelligence has given companies a marked advantage over competitors, say 45% of seasoned AI adopters; 20% attribute their company's revenue to AI.

**Simon, F. M. (2023). Escape me if you can: How AI reshapes news organisations' dependency on platform companies. Digital Journalism, 1–22.** <https://doi.org/10.1080/21670811.2023.2287464>

Publishers are wary due to past experiences with platforms, including loss of control, fear of lock-in, arbitrarily changing conditions and entrenching existing dependencies,

**Saikaly, T. (8 November 2023). Whitepaper: The Transformative Role of Artificial Intelligence in the Publishing Industry. FADEL.** <https://fadel.com/whitepaper-the-transformative-role-of-artificial-intelligence-in-the-publishing-industry/>

A range of major US media companies (New York Times, Bloomberg, BuzzFeed, etc) offer their views. Pluses: better editorial processes, personalized content recommendations, efficient market research, streamlined translation and localization, predictive analytics. Minuses: ethical and legal concerns, privacy and data security, dependence on technology, bias in AI algorithms.

**Watson, Amy. (18 December 2023). Artificial Intelligence (AI) in publishing in the United States. Statista.** <https://www.statista.com/topics/11019/artificial-intelligence-ai-in-publishing-in-the-united-states/#topicOverview>

AI use is growing among US-based publishers and journalists.

**Williams, L. (21 September 2023). AI vs human: the media industry's way through the AI revolution. Verdict.** <https://www.verdict.co.uk/ai-vs-human-the-publishing-industrys-way-through-the-ai-revolution/>

A short, key article noting: the AI market is expected to reach \$909b by 2030; creative industries petitioned Hollywood; the Washington Post suggests headline generation, translation and formulaic article writing as valuable. Massive changes are expected in how content is produced, packaged, and distributed. Digital avatars, AI-generated copy and AI headline generation will be common. Primary content will rise in value.

### CONTENT CREATION

**AI: The next enabler of media, journalism, and content creation? (25 February 2021). News, ITU.** <https://www.itu.int/hub/2021/02/ai-the-next-enabler-of-media-journalism-and-content-creation/>

The four key Cs for media AI to resonate include: the citizen, content, context, and container.

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AI has abilities to 'see', 'hear', 'speak', 'move' and 'write' in audio, image and video analysis, gaming, journalism, script writing, filmmaking, social media analysis and marketing.

**Anton Korinek. (10 March 2023). AI is reshaping economic research. Brookings Institute. CEPR.** <https://cepr.org/multimedia/ai-reshaping-economic-research>

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In academic publishing, ease the review process by automating tasks like checking statistics, finding plagiarism and summarizing research findings, while still leaving the final decision-making to human experts.

**Jennifer Chubb, Peter Cowling, Darren Reed. (2022). Speeding up to keep up: exploring the use of AI in the research process. Springer London.** [https://www.researchgate.net/publication/355031790\\_Speeding\\_up\\_to\\_keep\\_up\\_exploring\\_the\\_use\\_of\\_AI\\_in\\_the\\_research\\_process](https://www.researchgate.net/publication/355031790_Speeding_up_to_keep_up_exploring_the_use_of_AI_in_the_research_process)

AI can support processes, management and evaluation.

**Oloff C. Biermann, Ning F. Ma, Dongwook Yoon. (2022). From Tool to Companion: Storywriters Want AI Writers to Respect Their Personal Values and Writing Strategies. University of British Columbia.** <https://dwyoon.com/files/papers/dis2022-aiwriter.pdf>

Storywriters desire want control over writing and to prioritize emotional values; they distrust AI in challenging sub-tasks (e.g., creating characters and dialogue); and do not expect the AI control mechanism to match their writing strategies.

**Palmer, J. (26 August 2023). Revolutionizing publishing by embracing Text-to-Speech and AI voice cloning. Cryptopolitan.** <https://www.cryptopolitan.com/publishing-text-to-speech-ai-voice-cloning/>

Text-to-speech and AI voice cloning technologies are improving quickly, bringing more immersive and accessible content for diverse audiences.

**Sybing, R. (28 January 2024). How research AI can enhance your analysis. ATLAS.ti.** <https://atlasti.com/research-hub/how-research-ai-can-enhance-your-analysis>

AI can enhance research by organizing and analyzing large data sets, which helps insights to emerge more quickly. It streamlines coding and predictive analytics in research.

**Team, A., & Team, A. (5 March 2023). The impact of AI on content translation and localization. AIContentfy.** <https://aicontentfy.com/en/blog/impact-of-ai-on-content-translation-and-localization>

Google Translate, Airbnb, Netflix, Facebook, SDL are examples that provide translation services to businesses. AI-powered tools translate texts, detect cultural nuances and idiomatic expressions and localize content by industries and region.

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AI can automate repetitive tasks, enhance audience analysis, improve email outreach efficiency and provide personalized content recommendations.

**Jarvis, S. (28 January 2024). AI-driven Book Marketing Strategies for Authors. BooxAI.** <https://booxai.com/ai-driven-book-marketing-strategies/>

Use data analytics for personalized marketing campaigns by accessing browsing history, purchasing patterns and social media and using chatbots. Consider virtual and augmented reality tools.

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Study of 11 digital publishers in low- and middle-income developing countries shows that they use global platforms especially because of their distribution power but have concerns regarding lack of consultation of developing country audience and cultural bias.

**Texta.ai Blog Writer. Revolutionize Your Digital Marketing Strategy with the AI World Book.** <https://texta.ai/blog-articles/the-future-is-here-how-ai-is-revolutionizing-digital-marketing>

AI can help with digital marketing strategies, campaign optimization and improved customer experiences.

**Tsvetanov K. Book Marketing with AI. (n.d.). Bookwiz Blog.** <https://bookwiz.io/blog/book-marketing-with-ai>

AI is being used for book covers, sales descriptions and targeting audiences.

## RISKS

**AI and media companies negotiate landmark deals over news content. Financial Times.** <https://www.ft.com/content/79eb89ce-cea2-4f27-9d87-e8e312c8601d>

Media industry leaders copyright concerns. Tech companies launch products without consultation, leading to retroactive attempts to negotiate payment for the usage of content.

**Alter A., Harris E. (20 September 2023) Prominent Authors Sue OpenAI, New York Times.** <https://www.nytimes.com/2023/09/20/books/authors-openai-lawsuit-chatgpt-copyright.html>

OpenAI's chatbots now produce derivative works that mimic and summarize the authors' books, potentially harming the market for authors' work. Writers were neither compensated nor notified by the company. Some argue that if an AI programme ingests copyrighted works to train its computer model and then creates substantially different new works, that constitutes fair use.

**De Kai. (10 December 2023). Should A.I. Accelerate? Decelerate? The Answer Is Both. The New York Times.** <https://www.nytimes.com/2023/12/10/opinion/openai-silicon-valley-superalignment.html>

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**George, N. (2023b, September 28). Analysis: The success of Generative AI in the book sector is based on theft. EWC - European Writers Council.** <https://europeanwriterscouncil.eu/gai-is-based-on-theft/>

Few AI companies disclose information on the copyright status of the data used to 'train' its large language models. Few disclose energy consumption or efforts towards emissions reduction. None reported on safety audits and mitigation strategies for structural or systemic risks.

**Grynbaum M., Mac R. (27 December 2023). The Times Sues OpenAI and Microsoft Over A.I. Use of Copyrighted Work.** <https://www.nytimes.com/2023/12/27/business/media/new-york-times-open-ai-microsoft-lawsuit.html>

'Millions of articles from The New York Times were used to train chatbots that now compete with it, the lawsuit said.'

**Mollick E. (6 January 2024). Signs and Portents. Blog One Useful Thing.** <https://www.oneusefulthing.org/p/signs-and-portents?triggerShare=true>

This Wharton professor's newsletter says to look to the early adopters to see AI impact: it boosts performance for complex tasks; alters truth; serves as a tutor (including in developing countries); and is evolving fast. CEO understanding of how to manage AI in the workplace lags, while early adopters forge ahead.

**Myers A. AI-Detectors biased against Non-Native English writers. (15 May 2023).**

**Stanford HAI.** <https://hai.stanford.edu/news/ai-detectors-biased-against-non-native-english-writers>

AI detectors are especially unreliable when the real author (a human) is not a native English speaker.

**Wong M. (23 June 2023). AI Is an Existential Threat to Itself. The Atlantic.** <https://www.theatlantic.com/technology/archive/2023/06/generative-ai-future-training-models/674478/>

Generative-AI programs may eventually consume material that was created by other machines—with disastrous consequences.

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European publishing trade bodies in Frankfurt call for action on generative AI, emphasizing the need for regulations to address potential copyright and intellectual property issues arising from AI-generated content.

**Department for Science, Innovation and Technology. (27 October 2023). Leading frontier AI companies publish safety policies. GOV.UK.** <https://www.gov.uk/government/news/leading-frontier-ai-companies-publish-safety-policies>

AI firms share their safety policies to boost transparency and best practices within the AI community.

**Ferencz J., López-González J., García J.O. (2022). Artificial intelligence and international trade: Some preliminary implications. OECD.** <https://www.oecd.org/publications/artificial-intelligence-and-international-trade-13212d3e-en.htm>

OECD found that AI has the potential to transform trade, international business, and innovation, highlighting the importance of trade in deploying AI solutions globally, and the need for new policy considerations.

**Kastrenakes, J., & Vincent, J. (26 June 2023). Hope, fear, and AI. The Verge.** <https://www.theverge.com/c/23753704/ai-chatgpt-data-survey-research>

This Vox study of 2,000 people in the US shows that they use AI tools most for search, brainstorming and art; a majority felt AI did a better job than they could; a majority are concerned about remunerating artists; and a majority would like to see stronger regulation for AI use.

**Lavizzari C. Caemmerer L. (2022). AI in publishing and licensing – publishing and licensing in AI. WIPO.** [https://www.wipo.int/export/sites/www/about-ip/en/artificial\\_intelligence/ind\\_scollo\\_lavizzari.pdf](https://www.wipo.int/export/sites/www/about-ip/en/artificial_intelligence/ind_scollo_lavizzari.pdf)

Transparency is needed to acquire and license data, and address copyright exceptions and limitations.

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Guidelines and ethical principles are required for artificial intelligence in journalism.



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