

The challenges faced by the international news agencies AFP, Reuters, AP and Bloomberg in the era of GAFA and Artificial Intelligence

**by Paloma Martínez Méndez (UQAM), under the supervision of Patrick White (UQAM)
- July 29, 2022**

Abstract

Today, international news agencies are faced with an ever-changing technological landscape and pace of production to which they must adapt. They must also balance the loss of revenue, the loss of audience loyalty, and the competition they face from disinformation sources.

In this context, our research proposes an analysis of the main challenges faced by news agencies AFP, Reuters, AP and Bloomberg in the era of GAFA and Artificial Intelligence.

Chapter 1: Introduction

International news agencies are global "news brokers"¹ that collect, write, and share information from around the world or from a specific country to newspapers, periodicals, broadcasters, government agencies, and other users.²

Typically, an agency does not publish the news itself, but provides it to its subscribers who, by sharing the cost, obtain services they could not otherwise afford³.

By the latter half of the twentieth century, these agencies had become ubiquitous⁴ in the media landscape, because it was during this period that the world's public began to access national and international news produced by one or more of them, and through the mass media they serve.

Today, many mass media depend on agencies for the bulk of their news, including the few that have their own newsgathering capabilities⁵.

¹ Christopher H. Sterling, *News Agencies*, Editor(s): Donald H. Johnston, *Encyclopedia of International Media and Communications*, Elsevier, 2003, Pages 235-246,

² Britannica, The Editors of Encyclopaedia. "news agency". *Encyclopedia Britannica*, 28 Aug. 2015.

³ *ibid*

⁴ *op cit* p. 235

⁵ *op.cit.* (*Encyclopedia*)

American media historian Christopher Sterling also explains that international news agencies generally share several common characteristics:

- They are private entities owned either by the media they serve or by anonymous corporations.
- They all have a long history that dates back to the 19th century [...]
- Despite their global reach, they are all (with the exception of Reuters) the primary provider of national news to the media of their home countries.
- They act as competitive businesses, seeking customers in the media they need to serve.
- They all provide similar products: the words, images, and data of daily news, provided 24 hours a day, often in multiple languages.
- They have all been at the forefront of innovation or application of communication technologies.
- And in the 1970s, they (especially Western agencies) were highly distrusted in Third World countries.

Today, there are four international news agencies: AFP, AP, Reuters and Bloomberg (Montane, 2021). They are increasingly being challenged by social networks and web giants (Palmer, 2020), who are cutting into their market share by publishing their news, often without royalties.

When the oldest news agencies were founded over 170 years ago, at a time when access to information in remote parts of the world and the ability to transmit it was their almost exclusive task, the three main international news agencies, Reuters, Havas (now Agence France-Presse) and the Associated Press, had a monopoly on the international flow of news⁶.

From then on, as media providers for all media, they ensured access to information in remote regions of the world which did not have the financial, logistical conditions or the know-how necessary for producing their own information in certain fields.

Media historian Michael Palmer explained in his latest book⁷ that the origins of these three agencies were closely linked to the expansion of telecommunications, that is, with the development of telegraph lines and the press between the 1830s and 1840s in Europe and the United States.

⁶ Artero, J. & Morales, R. (2008). Opciones estratégicas de las agencias de noticias europeas: Reuters, France Presse y EFE. Comunicación y Sociedad.

⁷ Palmer, M. (2020). International News Agencies: A History, Palgrave Macmillan.

Artero and Morales, for their part, suggest that the initial organization of the agencies was part of the colonial structure, because it was based on the political and military control of the overseas territories and their economic relations with their metropolises.

In their early days, some of these agencies primarily produced economic information, but over the years they have developed mainly as intermediaries between news events and the media, which eventually informs the public. (Artero, J. & Morales, R., 2008: 54)

Until the early parts of the 1990s, the main agencies provided content for thousands of regional and national media, thus consolidating their role in the international information market and continuing to take advantage of technological advances for their expansion.

According to Mark D. Alleyne, Janet Wagner⁸, even in 1993, five major agencies in four major countries dominated the bulk of international news: the Associated Press (AP), United Press International (UPI), Agence France Presse (AFP), Reuters, and the Soviet news agency TASS (Telegraphic Agency of the Soviet Union).

However, the social, political and economic changes, as well as the technological advances of the last two decades, together with the context of market globalization, have radically altered this picture and require a reinterpretation of the role of agencies in the chain of news production and distribution⁹.

According to Marcelo Botto, in the 21st century, with the emergence of technologies derived from the Internet, international news agencies have been faced with a new challenge, which is that of adapting to the enormous amount of information that circulates and is accessible to the media, institutions and individuals¹⁰.

On his party, Ignacio Muro Benayas¹¹ asserts that new technologies have forced international news agencies to emerge from the anonymity they have enjoyed since their birth as providers and intermediaries of information between the media and the public.

⁸ Alleyne MD, Wagner J. Stability and Change at the "Big Five" News Agencies. *Journalism Quarterly*. 1993;70(1):40-50.

⁹ *ibid*

¹⁰ Botto, Marcelo Norberto. 2012. *Historia De Las Agencias De Noticias*. Historia Del Periodismo Argentino, Volumen VII. Buenos Aires: Academia Nacional de Periodismo, República Argentina. p. 95

¹¹ Muro Benayas, Ignacio. 2011. El papel de las Agencias de Noticias, una nueva mirada. *Conexiones: revista iberoamericana de comunicación*, ISSN 1697-3720, Vol. 3, Nº. 2, 2011, págs. 37-48.

This economist, professor of journalism and former director general of the Spanish news agency EFE, believes that while traditional media suffer from disputed credibility, international news agencies are simultaneously gaining credibility and notoriety.

Already in 2011, Muro Benayas explained that the disappearance of agencies, which many predicted a decade earlier, never materialized, quite the contrary.

The Internet has forced international news agencies to make their news production accessible like any other media and to compete like another content provider, although their function has not yet been replaced, allowing them to occupy their place in the media system; in this regard, news agencies - mainly international - still have no competition, as they still distribute two thirds of the news published in the world (Muro Benayas, 2011).

However, as the Internet has become the center of changes in the journalistic sphere and the media market, agencies have developed projects to adapt to the needs imposed by the new global media context, explains Muro Benayas.

Oliver Boyd-Barrett, a specialist in international communication, pointed out that at first, the Internet was seen more as a threat than an opportunity because of the reduction in the costs of accessing the market for the collection and distribution of information¹².

In other words, information became increasingly accessible on the Internet and media and audiences are now less willing to pay for it through agencies.

However, Boyd-Barrett explained that by 2007, major news agencies had successfully adapted to a multimedia world by offering Internet-based news and information services for direct access to clients, as well as "news packages" and information for client websites and mobile phone services¹³.

Oliver Boyd-Barrett also argued that the advent of web-based information has also caused many agency clients, particularly the media, to reduce their own international information gathering, thereby increasing their dependence on agency services.

¹² Oliver Boyd-Barrett (2008) News Agencies in the Era of the Internet, Media Asia, 35:3, 163-169. Retrieved from: <https://doi.org/10.1080/01296612.2008.11726880> p.p. 165

¹³ ibid

In 2022, as we know, access to information about any event in any corner of the globe within minutes of the event continues to be greatly facilitated by social networks and the Internet, which define the world of information and the way we consume it.

International news agencies are also faced with the increasing accessibility of non-negligible sources of misinformation as well as a changing technological environment, including the entry of artificial intelligence, the Blockchain, and the Internet of Things.

These are all elements that may have fueled distrust in the media, politics, and recognized institutions around the world. The period of the pandemic (2020-2022) has been particularly trying with respect to this lack of trust.

As part of its 2021 report, the Edelman Trust Barometer¹⁴ reported an epidemic of misinformation and "widespread distrust of societal institutions and leaders around the world."

According to the index, four bodies particularly affected by the lack of public trust - corporations, governments, NGOs and the media - were in an "information bankruptcy" and need to restore public trust by charting a new course.

In 2022, the same trust measure realized that 52% of Canadians say they trust the media, down two points from 2021¹⁵. However, trust in almost every media outlet is still low. Trust in almost every institution has declined dramatically since May 2020.

In addition, a major study conducted in the U.S. in 2020 and 2021 by the Media Insight Project examined the issue of trust from a values perspective.

This collaboration between the American Press Institute and the Associated Press-NORC Center for Public Affairs Research revealed that not all Americans universally embrace many of the core values that guide journalistic work. And the unease with these core values of journalism has more to do with people's moral instincts than with politics¹⁶.

A similar sentiment was expressed in a June 2022 Gallup poll among the American public.

In fact, according to this sampling, only 35% of Americans trusted newspapers "a great deal" or "to some extent". As for news broadcasted on television, the percentage decreased further, reaching only 20% of the population who express confidence in them.

¹⁴ Daniel J. Edelman Holdings, Inc. 2021 Edelman Trust Barometer

¹⁵ Edelman Trust Barometer 2022: Trust in Canada

¹⁶ Young, Eric. *A New Way of Looking at Trust in Media: Do Americans Share Journalism's Core Values?* p. 4

In this context, our research proposes an analysis of the main challenges faced by news agencies in the world today, such as the loss of intellectual property, the practices of web giants (GAFA), the development of AI and Blockchain, the rise of Fake News and misinformation, online propaganda, the increasingly high costs of producing real-time information in 200 countries, outdated business models, etc.

To do this, our "qualitative field research" is based on Pierre Paillé and Alex Mucchielli's book "L'analyse qualitative en sciences humaines et sociales (2016)"¹⁷ [Quantitative analysis in human and social sciences]. Paillé described this type of study as "research that involves personal contact with the research subjects."

According to this author, research is qualitative when it meets two criteria. The first concerns the materials and methods designed for the collection of qualitative data (testimonies, field notes, video images, etc.). The second criterion is that the data collected be analyzed in order to extract meaning rather than merely transforming it into statistics.

Our research therefore meets both premises. In terms of methodology, we consulted executives from four international news agencies through a questionnaire specific to humanities.

Only three agencies responded: AFP, AP and Reuters. We also did a qualitative analysis of the data obtained through the above-mentioned questionnaire based on the book, *Analysis of Qualitative Data* by Matthew B. Miles and Michael Huberman (2003).

The following pages are structured according to the observations that came from the literature review and the readings that we have made since the start of this research in September 2021. Our most recent readings date back to July 2022.

We addressed the following topics: state of play per agency, combating misinformation, economic challenges, and technological adaptation.

¹⁷ Paillé, P. & Mucchielli, A. (2016). Chapter 1. *Choosing a qualitative analysis approach*. In: , P. Paillé & A. Mucchielli (Dir), *L'analyse qualitative en sciences humaines et sociales* (pp. 13-33). Paris: Armand Colin. <https://doi-org.proxy.bibliotheques.uqam.ca/10.3917/arco.paill.2016.01.0013>

Chapter 2: State of Play per Agency

According to our observations and readings, three elements defined the current landscape of international news agencies: technological adaptability, diversification of content and services, and the ability to prove the relevance of their work. These three aspects seemed to be interconnected.

It is clear to us that on the one hand, agencies are faced with a changing technological landscape and pace of production to which they must adapt, and on the other hand, they must balance the loss of revenue, the loss of audience loyalty and the competition they face from sources of misinformation.

The following is an overview of each of the four agencies covered in this research.

2.1. Agence France-Presse

Founded in 1835 under the name Havas, the agency known today as Agence France-Presse, or simply AFP, is the oldest of the international agencies. In 2021¹⁸, 1,700 AFP journalists in 260 cities (151 countries) around the world produced news content in several formats and in six languages (French, English, Spanish, Portuguese, German, Arabic).

That same year, the agency boasted a global network of 96 fact-checkers who wrote more than 2,400 articles in 18 languages in 2020 debunking the fake news related to the pandemic, among others¹⁹.

As far as finances are concerned, AFP ended 2020 with a net income (profits) set at a historic level of €5.3 million²⁰. We must recall that in 2019, the net result had been positive for the first time since 2013.

In 2021, AFP's revenue was €309.5 million²¹. The profit thus reached another historic level of €10.6 M, twice as much as in 2020.

¹⁸ Clèdes-Flahaut, Charles. 2020. First the Facts - 2020 Activity Report. Agence France-Presse

¹⁹ *ibid*

²⁰ Agence France-Presse. 14 April 2021. AFP posts slight growth in commercial revenues in 2020 and achieved historic net income

²¹ Agence France-Presse. 22 April 2022. AFP: green indicators in 2021

This net profit thus helped to reduce AFP's debt level, which stands at €39.6M compared to €49.2M at the beginning of 2018. The objective is to pay off half of the debt by the end of 2024, and to have repaid all of it by 2028²².

AFP's good financial results in 2021 could also be attributed, at least in part, to the long battle it has waged to obtain compensation from Google for the distribution of its content on the web giant's search engine.

For the record, it should be mentioned that after two years of legal proceedings, on November 11, 2021, the agency signed an agreement with Google recognizing and remunerating AFP's ancillary rights.

This decision [of the Court of Appeal] was the result of a long quest to recognize the value of information. - Fabrice Fries²³

According to AFP's CEO, neighboring rights will allow AFP to "compensate for part of the loss of revenue from its press clients, weakened by the massive transfer of advertising resources to platforms²⁴."

Fabrice Fries also said he hoped that, despite the harshness of the legal battle, a more constructive relationship with Google can be established.

For her part, in responding to our questionnaire, Sophie Huet, AFP's central editor, pointed out that the agency has been "one of the spearheads of the battle" in Europe concerning neighboring rights to ensure that platforms pay for the use of content produced by the media from which they profit.

It is also worth mentioning that this agreement on neighboring rights will also have repercussions for AFP journalists.

Indeed, on May 6, 2022, the International Federation of Journalists announced that, according to a formalized agreement between AFP and French journalists' unions, it is understood that each journalist of this agency will receive a minimum annual amount of 275 euros gross. This amount will correspond, proportionally, to the amount that AFP will receive in neighboring rights²⁵.

²² *ibid*

²³ Agence France-Presse. First the facts - Annual report 2021. Editorial by Fabrice Fries.

²⁴ *ibid*

²⁵ International Federation of Journalists. 06 May 2022. France: first agreement on neighboring rights at AFP

The 2019 European Union directive on copyright and related rights in the digital market, transposed into French law, obliges platforms to negotiate with publishers and news agencies for the content they reproduce in return for remuneration. This remuneration is due in respect of the exploitation by the platforms of the neighboring rights of publishers and agencies on the content. The directive stipulates that part of this remuneration must be paid to journalists²⁶.

The agreement is limited in time and will end on December 31, 2024, although it is not clear from which date the compensation will apply.

Despite this agreement with Google, the world's oldest news agency is no stranger to the current reality of the media universe, nor to the news that defines it.

Regarding the main challenges to be faced by her agency in the near future, Sophie Huet sees the act of responding to "the crisis facing the world's media" as a result of the digital transition and the withdrawal of advertising agencies during the pandemic.

Retention of journalistic staff in the various regions of the world also remains an important issue for AFP.

2.2. Reuters

It is clear that a long way has been covered between what Thomson Reuters has become today and the service that was launched by Julius Reuter in 1850 with his carrier pigeons carrying news and stock market information between Brussels and Aachen in Germany.

Founded in London, Reuters is now a global provider of news and information to financial market professionals, media and corporations.

Before being acquired by the Canadian group Thomson Financial Corporation in 2008, Reuters was an independent international news and financial information company²⁷. The company is now the world's largest provider of international and business news.

²⁶ibid

²⁷ HAYES, Adam (2020). Reuters. Investopedia. Retrieved from <https://bit.ly/3yRhw1r> on May 21, 2022.

Thomson Reuters Corporation is now the official name of the company that resulted from this merger and, even today, it continues to be a multinational media, financial and news company. Its head office is in Toronto.

Some analysts believe that, since its creation as an agency, Reuters' role has always been formally defined as "transnational" rather than national, provincial or urban²⁸.

Researcher, Gordon M. Winder, argued that the agency was conceived and created as a 19th century producer services enterprise²⁹.

This professor of economic geography and sustainable development at the Ludwig Maximilian University of Munich, pointed out that in this capacity, and since its inception, Reuters sells its information products and services to the business community and governments rather than to individuals or households.

Reuters provides political and business information to Fleet Street³⁰, the City, Whitehall³¹ and Westminster³² and sells communication services to governments, individuals, organizations and businesses. The comprehensiveness of its services and network thus speaks to the question of London's status in the nineteenth century as an international city³³.

For his part, Simon J. Potter explained that in 1900, Reuter's had some 260 bureaus and correspondents³⁴.

News from the sources was, except in the most urgent cases, compiled in the offices of the major regional centers of Bombay, Cape Town, Melbourne and Shanghai, and then sent to the London headquarters by cable.

At these bureaus, news was edited and telegraphed to British newspapers and subscribers, then cabled back to Reuter's overseas offices, where it was re-edited for local consumption.

²⁸ WINDER, Gordon M. (2010). London's Global Reach? Reuters News and Network, 1865, 1881, and 1914. *Journal of World History*, 21(2). London's Global Reach? Reuters News and Network, 1865, 1881, and 1914. p. 273

²⁹ *ibid* p. 276

³⁰ The street is known for its 16th century printing and publishing houses. In the 20th century, most of the UK's national newspapers operated from here.

³¹ This street is recognized as the center of the United Kingdom's government

³² The seat of the English government since the year 1200. Westminster is often synonymous to the Parliament of the United Kingdom.

³³ WINDER, G. M. (2010). London's Global Reach? Reuters News and Network, 1865, 1881, and 1914. *Journal of World History*, 21(2). London's Global Reach? Reuters News and Network, 1865, 1881, and 1914. p. 3

³⁴ Potter, S.J., *News and the British World*, pp. 87-88.

Today, approximately 82 million people view more than two million unique pieces of content per year produced by 2,900 journalists in 200 Thomson Reuters bureaus around the world.

Overall, the company has nearly 25,000 employees, including 15,300 in the Americas, 5,100 in Asia Pacific and 3,600 in Europe, Middle East and Africa³⁵.

Of the 25,000 employees, approximately 6,200 are directly involved in the production of news and "editorial" content.

According to the U.S. business magazine Forbes, Thomson Reuters, as an employer, ranked 253rd out of 300 top employers in Canada in 2022.

The company also ranked 344th (out of 500) among employers for diversity.

Also, according to Forbes, other rankings per criteria include:

- 122nd out of 300 Best Companies in the World for Women 2021
- 288th out of 300 Best Employers for Women 2021
- 231st out of 250 of the world's most valued companies in 2018 for reliability and performance.
- 83rd out of 100 of the world's most valued brands in 2016 (World's Most Valuable Brands).

Also related to its workforce, in February 2022, Benefits Canada magazine reported that Reuters now allows employees to work from anywhere in their country of residence for up to eight weeks.

Reuters employees can also take up to 10 days of paid leave as caregivers, while bereavement leave has been increased to a maximum of 10 days for the loss of an immediate family member and three days for the loss of an extended family member.

Mary Alice Vuicic, head of human resources at Thomson Reuters, told the media that these new offerings respond to demands for increased flexibility in the context of the global coronavirus pandemic.

³⁵ Reuters News Agency. International News Agency. Corporate site. Retrieved May 2, 2022

Interviewed as part of this research, Gina Chua, former editor-in-chief at Reuters, believes that the challenges to be faced by news agencies in the near future will be to continue to adapt as technology advances and to work to reach new audiences.

In terms of its financials, on February 8, 2022, Thomson Reuters released its results for the fourth quarter and full year ending December 31, 2021. A 6% growth in total revenue and sales for the fourth quarter and full year was noted.

Under International Financial Reporting Standards, Thomson Reuters' revenue for the year 2021 stood at 1 billion, 710 million US dollars. For the year 2020 this figure was 1 billion, 616 million US dollars, which corresponds to the 6% change mentioned above³⁶.

The company's executives reported that these results exceeded their expectations.

"The momentum seen in the first nine months of the year continued in the fourth quarter. Revenue and sales growth were again strong and beyond our expectations, allowing us to end the year on a solid footing. Our performance reinforced momentum toward 2022, helping to build confidence as we worked to achieve our higher targets for 2022 and 2023."- Steve Hasker, president and CEO, Thomson Reuters³⁷.

These results represent an increase in the amount of money a company pays out as income to its shareholders. This increase amounts to 10% per share for the year 2021, which is the 29th consecutive annual increase, the largest increase since 2008³⁸.

2.3.Associated Press

Founded in May 1846, the AP celebrated its 176th anniversary in 2022. According to Michael Palmer³⁹, their origins in an almost identical way as the beginnings of AFP and Reuters which were linked to carrier pigeons, the AP's beginnings were rather associated with a pony express route through Alabama.

In reality, said Palmer, the "pony express" only really worked in the western United States in 1860-61, after which telegraph and railroad networks unified the transportation of people,

³⁶ Thomson Reuters. Press Release February 8, 2022. Thomson Reuters Reports Fourth-Quarter and Full-Year 2021 Results. Retrieved May 6 from: <https://tmsnrt.rs/3yRmPOp>

³⁷ ibid

³⁸ ibid

³⁹ Palmer, Michael. 2020. International News Agencies: A History, Palgrave Macmillan. p.12

goods and messages across the country.⁴⁰ For this specialist in the history of [news] agencies, the AP did not really shine until after these telegraph networks became fully active in the United States.

According to his most recent report (2021), this agency's network includes a presence in 243 offices around the world, including 10 regional editorial hubs in 96 countries⁴¹. Nationally, there is at least one parliamentary reporter in each state of the U.S.

With regard to its turnover, it is important here to mention that the last financial report published by the Associated Press was in 2017.

In that document⁴² that was made public in March 2018 and accessible on the AP website, the annual revenue was put at US\$510 million for 2017. This figure represents a decline from 2016, when the revenue corresponded to US\$556 million.

Today, data and analytics company Dun & Bradstreet estimates current AP revenue at US\$372.28 million⁴³.

Relative to the number of employees, Craft, a data company on service providers, estimates the number of AP employees at 3,850. The agency itself does not release this data regarding its staff.

As for the distribution of produced content, the Associated Press claims that more than half of the world's population "views" its productions⁴⁴. On average, by 2021, four billion people would have had access to Associated Press information every day⁴⁵.

In addition to its strong international presence, especially in the Americas, Associated Press is today showing a special interest in developing and strengthening local journalism through new technologies, including artificial intelligence.

Indeed, in April 2022, the AP released a report⁴⁶ showed that in more than 200 local newsrooms across the United States, there was a significant gap between large and small news organizations in terms of their use of AI and automation technologies.

⁴⁰ *ibid.*

⁴¹ AP by the numbers (2021)

⁴² Associated Press. 2017 CONSOLIDATED FINANCIAL STATEMENTS. Corporate site. Retrieved May 2022.

⁴³ Dum&Bradstreet. The Associated Press. Site of dun&bradstreet.

⁴⁴ Associated Press. AP by the numbers (2020)

⁴⁵ *op.cit* (AP by the numbers 2021)

⁴⁶ Associated Press. March 29, 2022. AP releases new report on AI in local news

In response to a number of the needs highlighted in the report, the AP has offered a free online curriculum open to all U.S. news organizations since May 2022, which includes live virtual workshops and recorded tutorials. International media can also access it if they request it⁴⁷.

It is also important to note that this effort goes hand in hand with the agency's internal efforts to make better use of new technologies in the gathering and processing of news.

This new program also follows an experiment initiated by the AP in 2021 to solidify a network of 130 newsrooms in several U.S. states called StoryShare⁴⁸. This local journalism project helped newsrooms to quickly share COVID-related information around during the deadliest waves of the Covid-19 pandemic.

2.4. Bloomberg

The international news agency, Bloomberg Business News, was founded in 1990 by businessman and politician Michael Bloomberg with journalist Matthew Winkler as editor-in-chief.

The agency is a branch of the Bloomberg LP consortium (originally named Innovative Market Systems). The company originally sold computer terminals containing financial data on stocks, bonds and other investments to Wall Street investment banks⁴⁹.

It is precisely through these master company terminals that the newly created news agency provided news texts to its clients who were also clients of the consortium. This is a far cry from the pigeons and carrier ponies that have fueled the folklore around other international news agencies.

However, Bloomberg News is nothing but a company full of surprises, not strange (although somewhat strange) but rather different, unique, completely out of the ordinary, said journalist Jodi Enda in an article from 2011.⁵⁰

At every turn, it kept surpassing expectations. Consider that it [the agency] was founded as a way to provide context to "The Bloomberg" data, an innovative terminal

⁴⁷ Associated Press. 29 March 2022. AP releases new report on AI in local news

⁴⁸ Fischer Sara. April 20, 2021. Exclusive: AP building local news collaborative. Axios Media Trends

⁴⁹ Roush, Chris. "Bloomberg News." Encyclopedia Britannica, 4 Sep. 2017, <https://www.britannica.com/topic/Bloomberg-News>. Accessed 7 July 2022.

⁵⁰ Enda, Jodi. 2011. "The Bloomberg Juggernaut." American Journalism Review: Ajr 33(1):20-33.

designed to provide investors with essential, reliable, up-to-the-minute information that would help them make money. It should be recalled that the terminal was developed by a Harvard graduate who had just been fired from his associate position at a Wall Street firm. Consider that a news agency that started just 21 years ago with a young, market-savvy editor and a handful of relatively inexperienced journalists has grown into a behemoth that employs 2,300 journalists in 146 bureaus and 72 countries.⁵¹

By 2019, the factual information presented by Enda had somewhat changed, but not that much. That year, the business news agency had 167 bureaus in several regions of the world, including North America, but also in more than 70 other countries around the world.⁵²

Although still headquartered in New York, Bloomberg Business News, in 1991, also opened bureaus in Washington, London, Tokyo, Toronto, and New Jersey. Between 1994 and 1996, the agency added Bloomberg Television, a business news channel, then an investment magazine called Bloomberg Personal, and finally Bloomberg Press, a publishing house that publishes books on investing, economics and current affairs.⁵³ In 2009, the company acquired BusinessWeek magazine (renamed Bloomberg BusinessWeek).

According to the agency, more than 5,000 pieces of content produced daily by Bloomberg News journalists are read by more than 325,000 "Terminal" subscribers, who are among "the most influential people in business and finance."

The stories also appear on the web, mobile, television, digital video, radio, print, and Bloomberg's live event platforms, and are picked up by more than 440 publications worldwide.⁵⁴

Thirty-two years after his agency was founded, Michael Bloomberg still owns 88% of the shares. The other 12% is owned by Bank of America, through Merrill Lynch, an American financial services company.

Michael Bloomberg «was, in 2022, the twelfth richest person in the world» according to the business magazine Forbes. His fortune has grown by leaps and bounds since the 2010s; it was

⁵¹ *ibid.*

⁵² Bloomberg L.P. Research. News and Research. Corporate site

⁵³ *op.cit.*

⁵⁴ Bloomberg L.P. Research. News and Research. Corporate website

18 billion US dollars in 2013, then 50 billion US dollars in 2018, and finally reaching 82 billion US dollars in 2022.

Chapter 3: Economic challenges and technological adaptation

The study *Journalism, media, and technology trends and predictions 2022*⁵⁵, concluded that the global media landscape will continue its trend toward profound technological change amid a prolonged COVID-19 pandemic that has been both disruptive and challenging.

The analytical observations and surveys conducted in the above-mentioned research by the Reuters Institute of Journalism, in collaboration with Oxford University, focused on news distributors rather than news brokers, such as news agencies. Its main findings may also be valid for news agencies.

In general, Nic Newman's research⁵⁶ concludes that as businesses, the media will accelerate their digital transformation while maintaining a financial equilibrium. Pricing online news seems to be an ultimate goal for many, although Newman stipulated that we should not expect the public to respond favorably and follow subscription trends,⁵⁷ especially if household economic conditions worsen in 2022.

This context ensures that agencies are challenged by web giants who "republish their news often without royalties" while "driving journalists to produce more in a multi-tasking environment" (White, 2019).⁵⁸

This media landscape is forcing agencies to keep pace with technology and audiences, and to find new sources of funding in order to keep up with technology. Their ultimate goal is to continue to be relevant to the clients who buy their content.

3.1. Economic challenges

⁵⁵ Newman, Nic. January 2022. *Journalism, Media, and Technology Trends and Predictions 2022*, DIGITAL NEWS PROJECT.

⁵⁶ Senior Research Associate at the Reuters Institute for the Study of Journalism and lead author of the annual Digital News Report since 2012.

⁵⁷ op. cit.

⁵⁸ PAFARC form

In the nineteenth century, news was one of the first media products to be marketed through international trade⁵⁹. Indeed, it was the demand for international news that enabled news agencies to become news wholesalers and to make a living from selling it.

As we know, the three transnational news agencies, the Associated Press (AP), Reuters and Agence France-Presse (AFP), have dominated this activity since then. However, in 2022, the panorama has significantly changed.

Indeed, today, as more and more people turn to digital aggregators for information, news agencies often have to allow Google (which dominates about 92 percent of the global search market) as well as Facebook and Instagram (which together control about 81 percent of the global social networking market) to share their content in order to stay relevant.⁶⁰

Caitlin Chin, from the Strategic Technologies Program at the *Center for Strategic and International Studies* explained that by publishing summaries and quotes from news articles, Google and Meta can spark user conversation within their platforms without them even having to click through to the publisher's website.

As a result, Chin says, newsrooms are competing with digital platforms for the same advertising pot. However, Google and Meta are winning this battle since they have almost unparalleled access to users' personal information, which allows them to target ads in a more granular way than traditional newspapers.⁶¹

In terms of 2021 revenues, Google and Meta brought in \$209.5 billion and \$114.9 billion in global ad revenue, respectively, which is a substantial growth from about \$36.4 billion and \$3.2 billion 10 years earlier.⁶²

At the same time, many news outlets have experienced the opposite trend: the Pew Research Center estimates that advertising revenue for publicly traded U.S. newspapers has fallen from \$27.1 billion in 2011 to \$9.6 billion in 2020, while print and digital newspaper subscriptions, time spent on U.S. news websites, and the number of employees in U.S. newsrooms have simultaneously declined.

⁵⁹ Ali Rafeeq & Shujun Jiang (2018) From the Big Three to elite news sources: a shift in international news flow in three online newspapers TheNational.ae, Nst.com.my, and Nzherald.co.nz, *The Journal of International Communication*, 24:1, p. 94.

⁶⁰ Chin, Caitlin (2022) How to Balance the Scales between Newspapers and Technology Giants | Center for Strategic and International Studies. Retrieved from <https://bit.ly/3OpTP5g>

⁶¹ *ibid*

⁶² *ibid*

In this global context, international news agencies have not been spared. The Reuters Institute for the Study of Journalism concluded that after a period in which digital advertising revenues have fled to digital platform giants, journalistic content producers around the world have an opportunity in 2022 to perform better.

The Reuters Digital News *Project's Journalism, media, and technology trends and predictions 2022* report argued that three-quarters (75%) of the sample of 246 editors, CEOs, and digital executives from participating media outlets are said to be confident about their company's prospects for 2022.

Compared to 2021, more publishers plan to implement subscription or membership strategies this year, with the majority, 79%, saying it would be one of their top revenue priorities, ahead of display and advertisement embedded in their content.

*In recent years, many publishers have stepped up efforts to get their audiences to pay for online content through subscriptions, memberships, or donations, in order to reduce their dependence on advertising revenue, which in the online milieu, tends to go to large platforms such as Google and Meta [...] These trends are now global, and our country pages show how leading publishers in Argentina, Colombia, Japan, Nigeria, and Kenya, for example, have recently launched or strengthened payment systems.*⁶³

However, nearly half of the media executives surveyed (47 percent) are concerned that subscription models will push journalism toward wealthier, more educated audiences at the expense of others.⁶⁴

When it comes to revenue sources, an average of three or four were cited by participating editors, CEOs and digital executives. These include "significant" revenues from technology platforms for content licensing, innovation, and philanthropic funds and foundations. The latter two have revenues that have risen, compared to last year.⁶⁵

⁶³ Newman, Nic. (June 15, 2022) Overview and key findings of the 2022 Digital News Report | Reuters Institute for the Study of Journalism.

⁶⁴ Newman, N., Fletcher, R., Robertson, C.T., Eddy, K., Kleis Neilsen, R. (June 2022). Digital News Report. Reuters Institute for the Study of Journalism.

⁶⁵ Newman, Nic. January 10, 2022. Journalism, media, and technology trends and predictions 2022 | Reuters Institute for the Study of Journalism

As mentioned in Chapter 2 on the state of play by agency, the signing of the agreement between AFP and Google marked a pivotal moment in the relationship between news content producers and the web giants.

In answering our questionnaire, Sophie Huet, AFP's Global Editor in Chief, pointed out that the agency was one of the "spearheads" of the "long battle" in Europe over neighboring rights that led to the adoption of a European standard and its subsequent transposition into French law.

"[These] focused on training journalists and journalism students from around the world in online news verification, as well as producing news stories that can be published on smartphones.⁶⁶"

As for the digital giants⁶⁷, more generally, Sophie Huet reported that their arrival in the media universe has "forced AFP to accelerate its transformation to meet new challenges."

AFP's central editor explained that GAFAs have propelled new forms of content production within the agency, all the while leveraging its global network and historical expertise in news verification and production and laying a stronger emphasis "on the place of the image."

On the other hand, said Sophie Huet, AFP will negotiate with other platforms to apply the new legislation that requires them to deal with publishers and news agencies to be able to obtain remuneration for the content they reproduce.

The case of Agence France-Presse is unique among the four agencies to which this research focuses on. Its agreement with Google sets a precedent and gives the agency some control over its copyrights and the rights to distribute its content.

However, since the other agencies have not won [or even started] their battles, they will have to come to their own agreements or adapt to their own contexts in a highly competitive media universe.

Asked whether her agency is in favor of GAFA royalties funding the media, Gina Chua, editor-in-chief at Reuters until April 2022, said the importance of- and commitment to quality journalism has never been stronger.

⁶⁶ AFP's responses to the Questionnaire of the UQAM study on international news agencies afp, ap, reuters and bloomberg in the era of GAFA and artificial intelligence, under the supervision of patrick white, professor of journalism at UQAM.

⁶⁷ Sometimes referred to as GAFA (Google, Apple, Facebook, Amazon) or GAFAM, when including Microsoft, or even GAMAM, considering the name change from Facebook Inc. to Meta.

For the 12-year news veteran of Thomson Reuters, it is essential to recognize the value of the excellent work that journalists do. However, how that value should be recognized is a more complex issue that has been the subject of many studies, according to Chua, though without naming the said studies.

It is essential to mention here that the Thomson Reuters consortium, of which the Reuters news agency is a part, is in a particularly healthy financial situation, according to the analyses of experts.

For example, the investor information site, Simply Wall St., explained that Thomson Reuters has a return on equity (ROE) of 41%, which is remarkably higher than the industry average of 15%.⁶⁸

Therefore, Thomson Reuters' exceptional 58% growth in net income over the past five years is not a surprise.

The Simply Wall St. analyst group says that after comparing Thomson Reuters' net income growth with that of the industry, it found that the company's growth figure was higher than that of the industry within the same period.

In conclusion, generally speaking, this provider of stock reports gives Thomson Reuters' financial health a 5/6 with a small downside over the long term.

However, does this finding have a direct effect on the news agency itself? We are not in a position to say for sure. However, we have seen that it is looking for ways to generate profits while saving money.

For example, in the fall of 2021, Cameran Harman, head of strategic partners for Meta (Facebook Journalism Project), reported that Reuters relies on Facebook's Instant Articles feature to support its business and audience growth.⁶⁹

According to Harman, Reuters has expressed to Facebook (Meta) its desire to increase the "the number of page views, monetization, organic audience and overall reach" of its content. To meet those needs, the agency has begun using the Facebook Instant Articles feature, a novel format that author Cameran Harman says allows for faster loading, increased News Feed relevance and a smooth reading experience on mobile.

⁶⁸ Simply Wall St. Could The Market Be Wrong About Thomson Reuters Corporation (TSE:TRI) Given Its Attractive Financial Prospects?

⁶⁹ Harman, Cameran (2021, September 8). Reuters leverages Instant Articles to support commercial and audience growth. Facebook Journalism Project.

Quoted in Harman's article, Pierpaolo Maniglio, director of strategic growth at Reuters says that a significant portion of the agency's best-performing content on Facebook is about hard news and breaking news.

"We wanted to understand if transitioning referral traffic from the mobile web to Instant Articles would have an incremental business benefit on our coverage of breaking news. [...] The results truly exceeded our initial expectations." - Pierpaolo Maniglio, director of strategic growth at Reuters

According to the information in Cameran Harman's article, the overall reach of Reuters content on Facebook steadily increased after the launch of Instant Articles, which has reportedly created incremental revenue growth.

"The results were more than 2.5 times better than our initial expectations, attaining the internal 12-month reach goal we set in less than 90 days. Comparing the average reach of similar link publications, we observed that in the first half of 2021, the KPI of opened articles was 120% higher compared to the previous period." - Pierpaolo Maniglio, director of strategic growth at Reuters.

Reuters articles on Facebook's Instant Articles feature began appearing in late August 2020. This showed, in our opinion, a new form of collaboration between a web giant and an international news agency.

As for the AP's relationship with GAFAMs, when Jim Kennedy, vice president for strategy at AP, was asked whether or not his agency was in favor of GAFA royalties funding the media, he responded in our questionnaire that his agency believes that all news providers should be fairly compensated for the content and services they produce.

As for Bloomberg, as explained by journalist Jodi Enda in 2011, rather than shrinking like so many other media outlets, Bloomberg is constantly embarking on new business ventures.

Bloomberg Government, for example, is aimed at Washington policymakers, politicians and lobbyists. Bloomberg Law, on the other hand, is for lawyers.

Bloomberg View, specializes in opinion columns. These are all examples of news websites that attest to Bloomberg's expansion and focus on the world's wealthiest and most influential people.

Our systems connect people in a way and at a speed no one else can, processing 100 billion market data messages, two million news stories and more than a billion email and instant messages daily. And we're building the global infrastructure - hardware, applications, network and interfaces - that our customers need to turn all this information into action. All these refers to critical work that requires cutting-edge technology, developed and implemented by a dedicated team of more than 6,000 technologists, including engineers, user interface professionals and data scientists.⁷⁰

Furthermore, it is no secret that the financial situation of the news agency's parent company is very healthy.

As far back as in 2011, journalist Greg MacSweeney explained that since Michael Bloomberg founded his company in 1981 using his 10 million US dollars severance package from Salomon Brothers, his company has captured about one-third of the multi-billion-dollar market for financial data, information, and tools/applications for financial professionals.⁷¹

The editorial director of InformationWeek Financial Services, also claims that the company has nearly \$7 billion in annual revenue, 85 percent of which comes from the Bloomberg Professional "terminal" service.

This is not to say that Bloomberg is relying on its original technology, but rather that the company is, pardon the expression, a new product launch and revenue generating machine.⁷²

While it is difficult to get details on Bloomberg's financials due to its status as a private company, its revenue was estimated to be 10 billion US dollars in 2018, if a Business Insider report is to be believed.

Moreover, Bloomberg L.P., the parent company of Bloomberg Business News, has acquired a variety of competitors over the years in different sectors, including media (New York radio station WNEW and BusinessWeek magazine), data companies (New Energy Finance), and even government and legal entities (Bureau of National Affairs).⁷³

⁷⁰ Bloomberg L.P. Pushing the boundaries on innovation- Tech At Bloomberg

⁷¹ MacSweeney, Greg, March 2011, Inside the Bloomberg Machine - Wall Street & Technology

⁷² Ibid.

⁷³ McFarlane, Greg. April 2020. How Bloomberg Makes Money: Professional Services, Subscriptions, and Licensing. Investopedia.

And as explained by Ian Silvera, Bloomberg recently took the somewhat bold step of launching its own news subsidiary in the United Kingdom under the name Bloomberg UK in order to compete with the British media.⁷⁴

According to the former business and political reporter turned Future News & Web3 Media communications director, London has become a testing ground for the kind of international expansion plans Bloomberg is implementing.

In the UK, Bloomberg aims at generating 100 million US dollars in annual revenue without giving a specific date for reaching the goal, says Silvera.

Scott Havens, CEO of Bloomberg Media, told the New York Times that the target audience for this new media venture would be in the "professional and affluent space," which Silvera said would "probably" put other media outlets, including the Times, the Telegraph, the Spectator, the New Statesman and the Economist, on notice.⁷⁵

3.1.1. Technological Challenges

As it is well known, news agencies are wholesalers of international information, which supply the world's media as well as financial markets, governments and corporations (White, 1997).

When we interviewed them individually, Sophie Huet, Global Editor in Chief at AFP, Gina Chua, then editor-in-chief at Reuters, and Jim Kennedy, senior vice president for strategy at the AP, all three cited digital transformations as one of the key challenges facing their agencies in the near future.

Sophie Huet believes that AFP needs to adapt its model (and the entire organization) to digital transformation "by producing content that is relevant in format and content and by moving towards the needs of the big platforms (news verification in particular) that are capturing a growing share of advertising revenue."

By adapting to technological changes, Agence France-Presse can deal with the crisis that is "hitting the world's media," its clients, believes Ms. Huet.

Moreover, it is by offering "reliable, multimedia and original information from the field" that AFP can support its clients, the media.

⁷⁴ Silvera, Ian. May 2022. Why people really pay for news - by Ian Silvera

⁷⁵ *ibid.*

As for Reuters' Gina Chua, the short-term challenges for news agencies are to continue to adapt and modernize as technology advances, thereby continuing to reach new audiences.

On the other hand, for AP's Jim Kennedy, news agencies face the imperatives of digital transformation and innovation at a time when revenue growth is difficult and access to innovative technologies requires significant investment.

3.1.2. How are international news agencies addressing these digital imperatives, as well as the pressure exerted on their operations by GAFAM?

While acknowledging that Google, Amazon, Facebook, and Apple are a substantial part of the digital ecosystem, Gina Chua admitted that Reuters partners with these platforms in a variety of ways to extend the value of Reuters' information to audiences around the world.

However, she said, her news agency's customers are also affected by the dominance of technology platforms, leading to a twofold effect on Reuters.

The AP's Jim Kennedy explained that the technology giants have become the dominant venues for news distribution and consumption and have absorbed much of the advertising revenue that once supported the news business.

In his view, too, the effect on his agency is twofold as the dominance of GAFAM impacts his media clients and, indirectly, his business as a provider to these distribution platforms as well.

3.2. New challenges, new technologies

Technological developments and financial constraints are also influencing the way news agencies produce and distribute information.

In 2022, artificial intelligence (AI) and blockchain technology, better known as the Blockchain, became to the agencies, a means to both fight misinformation and offer greater agility in the production and distribution of their verified information. Not to mention the possibilities of micropayments with the Blockchain and the monetization of archives in the form of NFT (non-fungible tokens).

For reference, let's just remember that the Blockchain is a technology that allows storing and transmitting unalterable information. The Office québécoise de la langue française describes it

as a "distributed and secure database in which successive transactions between users since its creation are stored chronologically in the form of linked blocks."⁷⁶

Blockchains are best known for the crucial role they play in crypto-currency systems, such as bitcoin, in maintaining a secure, decentralized record of transactions, says Adam Hayes. According to the sociologist and economist, a blockchain is the basis for "immutable records, or records of transactions that cannot be changed, deleted or destroyed.

This is why blockchains are also known as distributed ledger technology (DLT).⁷⁷

Speaking about the potential for blockchain to make journalism more credible, Saul Hudson, managing partner of strategic communications firm Angle42 and former managing director of the Americas at Reuters, told Cointelegraph:

"Too often, publications simply replace an online story with updated information that corrects an error in a previous version, without making it obvious what was changed. Accuracy is the lifeblood of a media organization. It may seem counterintuitive, but being transparent about factual errors is a way of gaining public trust."

Cryptocurrency journalist, Shiraz Jagati, meanwhile, believes that blockchain could potentially hold journalists to strict editorial standards, thanks in large part to the technology's basic operating principle (unchangeable), rooted in transparency principles.⁷⁸

"For example, the inviolable aspect of most blockchain systems can help establish a standard of transparency that will be needed to prove the authenticity of any images used in news stories as well as to combat problems such as "Deepfake videos."⁷⁹

Shiraz also believes that Blockchain systems can also help establish clear links between various news articles by creating an immutable database of articles that have been published by various media outlets in relation to a particular topic since its initial release.

In practice, artificial intelligence (AI) can also be a weapon in the fight against misinformation.

At AFP, the fact-checking team uses a plug-in called InVID-WeVerify that does verification through machine learning.

⁷⁶ Office québécoise de la langue française. 2017, Cryptocurrency vocabulary. Blockchain.

⁷⁷ Hayes, A., Brown, R.J., Kvilhaug, S. June 24, 2022. What Is a Blockchain? How Does It Work? Investopedia.

⁷⁸ Jagati, Shiraz. 5 Nov. 2022. Blockchain in journalism: Winds of change carry media to new frontiers.

Cointelegraph - The future of money.

⁷⁹ ibid

Launched in 2017 and developed by the agency's Medialab, this module "allows, among other things, to verify alterations on videos by fragmenting these videos into thumbnails (key frames)," explained Sophie Huet.

This same tool also allows for the verification of photos using so-called "forensic" filters, some of which are based on AI. Finally, it allows for optical character recognition (OCR), enhanced with machine learning, which can recognize all Latin languages (including handwriting).

According to Ms. Huet, InVID-WeVerify is used by more than 120 AFP fact checkers and, since it is available in open source, it is estimated that there are 57,000 external users per week in 202 countries.

In addition, another prototype is currently being tested that can recognize non-Latin characters, including Russian, Arabic, Chinese and Hindi, explained Sophie Huet.

AFP also relies on its own automatic transcription tool available in some 20 languages. The AFP Transcriber, which also works by voice recognition using artificial intelligence, was also developed by the agency's Medialab, in conjunction with the company Vocapia⁸⁰.

AFP Transcriber is used internally by more than 800 journalists and is available in some 20 languages, although it is mainly used in French, Spanish and English, Huet pointed out.

In addition, within AFP there is also the photo department, which, using an AI tool for object and face recognition, is working to "improve the indexing" of the agency's photographs. This tool is beginning to be used for the recognition of well-known personalities.

"Experimented on the Cannes Film Festival in 2019 and then the Euro 2020, Camino improves the quality of indexing and proves to be a time saver for editors. This decision support tool nevertheless requires preparatory modeling work and dictionary administration throughout the event."

AI should also facilitate the indexing of news stories, believes Mrs. Huet, because this task is as important as it is daunting for the editorial staff.

Sophie Huet also suggested that AFP was considering integrating Kairntech throughout its internal editorial network, considering that, with AI, this document analysis platform creates data sets that could be useful to them.

⁸⁰ This tool has been financed by the French National Research Agency.

Mrs. Huet also stipulated that this will make it easier to categorize content in the agency's six working languages and identify names of places, people or organizations for indexing purposes after validation by editors.

"All of these advances and experiments are being carried out through collaborations with various research bodies, including the Polis Research Institute at the London School of Economics (LSE), and the University of Vancouver to test our content using the Gender Gap Tracker developed by this university to analyze the respective weight of female and male sources in our English-language content.

Collaborative research between AFP and the University of Grenoble is also underway. This research is based on the application of natural language processing techniques (NLP, TLN or TALN)⁸¹ for the analysis of French-language news reports.

In addition, the editor-in-chief at AFP explained that in 2021, the graphic and Innovation department will continue its experiments on NLP in the framework of a new partnership with The Guardian, on a project for the automatic extraction of quotes from the agency's content.

The benefit of such a tool would be to facilitate the search to quotations "between quotation marks" of a given personality, to limit the results and to go much faster in the retrieval of contextual elements for documentation or for fact checking, which would allow, for example, to quickly verify changes in the statements of a personality on a given subject.

AFP's data journalism teams have been using automation systems for the automatic generation of dispatches, videos and infographics, especially in the last two years, on Covid-19 data. However, explained Sophie Huet, these systems were not built using AI.

In 2022, AFP journalists were also using facial recognition of another French startup, Newsbridge. This feature allows them to automatically archive the agency's live broadcasts as well as to make a selection of the latest news. It is then possible to make them available to the media (clients) after they have been automatically and quickly indexed.

⁸¹ TLAN is defined by Philippe Langlais of the University of Montreal as the discipline dedicated to developing automatic methods for manipulating human language utterances with the dual purpose of building concrete applications, such as translation or information extraction, to better model these utterances.

As for Reuters, its former CEO Gina Chua responded to our question on the topic by reporting on the Lynx Insight service, which the agency developed in 2018 as part of its "cyber newsroom" initiative.

She said the project aimed at "combining the best of machine capabilities and human judgment to foster better journalism."

The Lynx Insight service looks at large amounts of data and identifies trends, anomalies and key facts. From this analysis, this artificial intelligence service suggests stories for reporters to cover, particularly around results reports and sports data.

"The platform uses automated big data mining, as well as algorithms programmed by Reuters journalists, to go beyond routine reporting to proactively suggest new, data-driven angles that Reuters staff can pursue." - Gina Chua

The former managing director said the Reuters News Tracer™ is another use of artificial intelligence in Reuters newsrooms.

Gina Chua said the tool allows journalists to spot and validate real news stories in real time on Twitter.

"Reuters News Tracer uses the power of cognitive computing and machine learning to extract and validate information about potentially newsworthy events from the huge stream being broadcast on social media."

It should be noted that the Thomson Reuters corporation claims to have been using artificial intelligence to provide services to its customers for the past 30 years, and more generally beyond newsroom applications.

The Thomson Reuters corporate website⁸² explains that the company has been integrating AI and machine learning into its strategy for creating and delivering legal, tax, news and business content since the early 1990s.⁸³

Indeed, Thomson Reuters' research and development teams have developed a half-dozen AI-based technology products to deliver selected and sorted data to customers, from the legal and tax communities in particular.

⁸² Thomson Reuters. Artificial Intelligence. Corporate Site. Accessed June 2022.

⁸³ Thomson Reuters. Thomson Reuters brings the human touch to Artificial Intelligence. Sitcorporatif. Accessed June 2022.

Also, according to the corporate site, Thomson Reuters Labs specializes in applied research that is focused on exploring natural language processing (NLP), human-centered AI (HCAI) and DevOps artificial intelligence technologies. Its ModelOps tool combines AI and IT operations "with the goal of shortening the AI lifecycle."⁸⁴

The Associated Press, meanwhile, boasts that it was one of the first news organizations to leverage artificial intelligence and automation to bolster its journalistic operations.⁸⁵

Indeed, the AP's corporate site makes mention of the fact that its foray into artificial intelligence began in 2014, when its business news desk began automating stories about corporate earnings.

*Before using AI, our editors and reporters were devoting countless resources to important but repetitive stories and, more importantly, diverted from higher-impact journalism. It was this project that allowed us to experiment with new projects and establish informed leadership as more and more news organizations seek to adopt the technology themselves.*⁸⁶

Today, AP uses machine learning at key points in our value chain, including news gathering, production and distribution.

Responding to our survey on the topic, Jim Kennedy explained that in the newsroom, Associated Press journalists use AI technologies for a variety of purposes. Detecting breaking news, analyzing trends on social networks, creating automated content, automated transcription and translation, metadata tagging and image recognition are among some of the uses.

Indeed, its corporate website states that the AP uses AI technology tools for news gathering, production and distribution.

Especially for news gathering, the AP works with start-up partners to scan and analyze social media feeds using natural language processing to build its own internal tool that can more quickly verify social content, as well as those generated by the users.⁸⁷

⁸⁴ Thomson Reuters. Applied Research in Artificial Intelligence | Thomson Reuters. Corporate site. Accessed June 2022.

⁸⁵ Associated Press. Leveraging AI to advance the power of facts. Corporate site.

⁸⁶ *ibid*

⁸⁷ *op. cit.*

Indeed, when asked about the existence of a research and development (R&D) team within his media, the vice president for strategy at AP said that the agency works with several technology partners who provide them with AI solutions. He also added that he is constantly on the lookout for new innovative capabilities.

In addition, the AP has an internal working group which, while exploring the AI space, also serves as a pipeline of potential opportunities.

In terms of news production, the agency aims at "streamlining workflows" to allow journalists to focus on content, rather than unnecessary things.

This ranges from automatic video transcription to experimenting with automatic generation of video shot lists and story summaries. We are also currently automating sports and corporate reporting.

In terms of distribution, the AP says it wants to make it easier for its clients to access content and get it into production more quickly. In that context, we can read from the site that the agency is working to optimize content through image recognition, creating an initial taxonomy using technology known as computer vision.

When it comes to photos and cutting-edge technology, AP is a pioneer.

It should be recalled that in January 2022, the agency announced it would begin selling its photo productions in non-fungible tokens (NFTs)⁸⁸ to blockchain technology provider Xooa to develop a marketplace for its NFTs. This trade began with an initial collection that was released within weeks of its launch.

At the launch, the AP's director of blockchain and data licensing, Dwayne Desaulniers, said that "with Xooa's technology," his agency is able to offer these tokenized pieces "to a growing global audience of NFT photo collectors."⁸⁹

Each NFT will include a rich set of original metadata, thereby offering the collectors knowledge of the time, date, location, equipment, and technical parameters used in the shot.⁹⁰

Still in connection with the blockchain technology, it is worth noting that the AP has been a frontrunner for a few years now.

⁸⁸ Moon, Mariella. January 11, 2022. The Associated Press will turn its photojournalism into NFTs | Engadget.

⁸⁹ Associated Press. 10 Jan. 2022. AP to launch NFT photography marketplace built by Xooa

⁹⁰ ibid

According to an article written in November 2020, Shiraz Jagati reported that the Associated Press had begun publishing U.S. presidential election results on the Ethereum and EOS blockchains using Everipedia's OraQle software.⁹¹

The journalist and cryptocurrency analyst, explained that by using such an innovative system, the AP had attempted to establish "a permanent, tamper-proof record" of results for each state as they came in.

Moreover, in October 2021, the Associated Press announced plans to make its trusted economic, sports, and race call data sets available to major blockchains via Chainlink⁹², "the world's largest decentralized oracle network."

According to the agency's press release, this allows for "smart contracts⁹³" on any blockchain to interact securely with the AP's real-world data.

By launching a Chainlink node, which securely connects blockchain environments with external data, the AP's data will be provided and sold directly to applications running on various blockchains. The data will be cryptographically signed to verify that it is from the AP.

It is important to note that in March 2022, The Associated Press published a report that provides insight into local media's understanding of artificial intelligence and their willingness to use it to meet their journalistic and operational needs.

The AP's interest in this issue is not exclusive to it, admit the authors of "Artificial Intelligence in Local News : A Survey of US newsrooms' AI readiness."

Indeed, Aimee Rinehart and Ernest Kung believe that The AP's focus on AI is more of a trend in the news community⁹⁴. The research report cites recent publications done, among others, by the London School of Economics and Political Science's Department of Media and Communications that described, in 2019, the growing extent of AI adoption by news providers around the world.

⁹¹ Jagati, Shiraz. 5 Nov. 2022. Blockchain in journalism: Winds of change carry media to new frontiers. Cointelegraph - The future of money.

⁹² Associated Press. 21 Oct. 2022. AP, Chainlink to bring trusted data onto leading blockchains.

⁹³ A program whose code is written on a blockchain and in which a set of instructions is defined that executes automatically when certain conditions are met. (Source: https://gdt.oqlf.gouv.qc.ca/ficheOqlf.aspx?Id_Fiche=26544786)

⁹⁴ Rinehart, A., Kung, E., March 2022. Artificial Intelligence in Local News A survey of US newsrooms' AI readiness. The Associated Press. P. 3

Reinhart and Kung also pointed to the study by the Reuters Institute for the Study of Journalism at Oxford University, which notes that AI technologies have become the norm for large national and international publishers.

However, say the researchers, there was a suspicion that the awareness and use of AI had not reached the "smaller" news providers.

This perceived "gap" in AI awareness and adoption prompted the AP to pursue an AI initiative for Local News, funded by the John S. and James L. Knight Foundation, to understand the true state of the art at the local level and to promote smart, ethical uses of AI technology that can help local news providers improve their journalistic work, achieve efficiencies, and reduce costs.⁹⁵

The key takeaways from the survey and analysis conducted by Reinhart and Kung relate to news gathering, production, and distribution, as well as the most essential aspects of the media world.

The authors concluded that the use of artificial intelligence by local media and newsrooms could significantly reduce the workload of journalists and content administrators.

With increased use of transcription tools, automatic receipt of alerts for new material or content, or intelligent systems for generating, optimizing, and scheduling publications, small newsrooms where staff must multi-task would save a great deal of time.⁹⁶

After the report was released, the AP said it wanted to address "many of the needs highlighted" in the report, thereby making available a free online study program as from April 2022, open to all U.S. news organizations. It includes live virtual workshops and recorded tutorials on AI. International media can access all recorded sessions of the program.⁹⁷

⁹⁵ *ibid.* p. 4

⁹⁶ *ibid.* p. 43

⁹⁷ Associated Press. Press Release. March 2022. AP releases new report on AI in local news

Chapter 4: Fighting disinformation

"We are entering a new era of disinformation," said Ukrainian journalist Mstyslav Chernov, speaking at the Davos World Economic Forum (WEF) in 2022.

Russian authorities have questioned the veracity of many of Chernov's photographs (images), one of the last international reporters in Mariupol, as his photographs had "become crude symbols of the war in Ukraine."⁹⁸

Mstyslav Chernov believes that we are living in an era in which the images we show and the facts we present are losing their relevance.

He argues that we are no longer in an era of asking whether traditional journalism has become obsolete in the age of social networks, but rather, we are in a time when *"fact-based journalism from reliable sources is more important than ever, as a counterweight to the rise of social media-fueled disinformation and propaganda."*⁹⁹

The Ukrainian journalist's findings are no surprise to international news agencies which have, for several years, been working in their own right and also in collaboration with other agencies, media and academia to combat disinformation.

For example, the agreement between Google and AFP on neighboring rights signed at the European level for a period of five years also includes a program to combat disinformation. To this end, AFP will offer training in fact-checking.¹⁰⁰

In addition, in the spring of 2021, following a call for proposals, the European Commission selected Agence France Presse to participate in three European programs to fight disinformation in France, Eastern Europe, Belgium and Luxembourg.

Starting from September 2021, "hubs against disinformation" have been created across these territories. In France, AFP is working with the Medialab of Sciences Po Paris, the CLEMI (Center for Education in Media and Information) and auditors from the French media landscape.

In Poland, the Czech Republic and Slovakia, the agency is partnering with Charles University in Prague and the Slovak research institute KInIT, which are working on improving

⁹⁸ Gray Calvo, Harry, June 2022, 'Journalism is under attack': Experts explain why it needs defending

⁹⁹ *ibid.*

¹⁰⁰ Bernard, Louise and Patri, Alexis. November 2021, Neighboring Rights: A Historic Agreement Between Google and Agence France Presse

disinformation detection algorithms. Finally, in Belgium and Luxembourg respectively, the partnership includes the Vrije Universiteit in Brussels and RTL, the main private television station in Luxembourg.¹⁰¹

It should also be noted that in April 2021, AFP became Facebook's first global fact-checking partner¹⁰² through an "educational campaign" in the form of fake news awareness videos.

This collaboration has led to a second one, which aims at having Facebook subsidize it in the organization of training in the fight against disinformation in newsrooms around the world.

A similar model had also been set up between the same social network and Reuters¹⁰³ through the Facebook Journalism Project.

In August 2021, Twitter announced a partnership with the Associated Press and Reuters "to deliver credible news faster on the social network, as part of an effort to combat the spread of fake news."¹⁰⁴

Twitter's senior director of content curation, Johanna Geary, wrote in her statement, "We are excited to announce that Twitter is now collaborating with The Associated Press (AP) and Reuters to expand our efforts to identify and value credible news on Twitter."

The same document also stated that in the initial phase of the program, the AP and Reuters were to focus solely on verifying English-language content.

Hazel Baker, Reuters' head of user-generated news gathering, specified that "trust, accuracy and impartiality are at the heart of what Reuters does every day, providing billions of people with the information necessary for them to make smart decisions." These values, she said, also underlie Reuters' commitment to stopping the spread of false information.

*We are excited to partner with Twitter to leverage our deep global and local expertise to serve the public conversation with reliable information.*¹⁰⁵

For his part, Tom Januszewski, vice president of global business development at the AP, recalled that the agency has long worked closely with Twitter, as well as with other platforms,

¹⁰¹ Boulay, Léa. May 2021. AFP continues its fight against misinformation on an international scale.

¹⁰² Meta Inc. In France, Facebook is partnering with AFP for an educational awareness-raising video campaign.

¹⁰³ Kapoor, A., Lowe, A. May 2021. Announcing the Reuters and Facebook Journalism Project e-Learning Course for Journalists.

¹⁰⁴ Geary, Johanna. August 2022. Bringing more reliable context to conversations on Twitter.

¹⁰⁵ *ibid.*

to extend the reach of factual journalism. "This work is at the heart of our mission," he added.¹⁰⁶

With respect to the partnership announcement, Reuters reporter Sheila Dang¹⁰⁷ said that like other social media companies, the San Francisco-based company has been under pressure to remove misleading or false information from its site.

On its part, Bloomberg has its own strategy for combating misinformation.

The company is partnering with local media outlets, particularly in Africa, through its Bloomberg Media Africa Initiative (BMIA), which provides funding to support the creation of evidence-based content, including fact-checking on the impact of the pandemic, particularly in Kenya and South Africa.

"The BMIA Community Media Fund was created to improve citizens' access to reliable information, to give voice to marginalized voices, and to advance reporting on socio-economic issues that impact regional communities in Africa. As we face economic insecurity amidst this pandemic, access to reliable local news and information has never been more important, or more threatened by false and misleading information." - Erana Stennett, Director, Bloomberg Media Initiative Africa

In addition, in the context of technological advancement, Bloomberg is providing financial support for research in artificial intelligence, which could help combat fake news.

Indeed, at the 2022 annual conference of the North American Chapter of the *Association for Computational Linguistics* (NAACL 2022), researchers from Bloomberg's AI Engineering group presented three pieces of research in natural language processing (NLP) and computational linguistics.

One of them is particularly interesting in terms of combating disinformation and misinformation.

The paper entitled Learning Rich Representation of Keyphrases from Text¹⁰⁸ by Mayank Kulkarni, Debanjan Mahata, Ravneet Singh Arora, and Rajarshi Bhowmik focuses on how to train task-specific language models for recognizing key phrases from text documents.

¹⁰⁶ *ibid.*

¹⁰⁷ Dang, Sheila. August 2, 2021. Twitter partners with AP, Reuters to battle misinformation on its site.

¹⁰⁸ Kulkarni, M., Mahata, D., Singh Arora, R., Bhowmik, R. Learning Rich Representation of Keyphrases from Text - ACL Anthology

In their paper, the authors introduce the notion of Falsesum, a data generation pipeline designed to automatically produce NLI (natural language inference) examples in documents.

Falsesum consists of a model for generating text from an excerpt of a source document and its corresponding summary, and then producing a perturbed summary that is factually inconsistent with the input. These generated inconsistent summaries are as smooth and plausible as their factually consistent counterparts, the study authors explained. The false summaries can then be used as examples to train the machines to distinguish factual from non-factual summaries.

Notwithstanding their research, the model, and the data generated are generally complex, with the authors hoping they can improve the applicability of NLI classification models.

All the examples of partnerships and projects to combat misinformation seemed to demonstrate a certain concern on the part of agencies regarding the growing lack of trust of citizens towards media institutions, among others.

However, according to Laurent Petit, in order to fight misinformation, it will be necessary to go much further than fact-checking¹⁰⁹.

For this professor of information and communication sciences at La Sorbonne University, the origin of widespread distrust is that the interpretation of facts seems to be more and more limited by accounts presented as imposing individual commentaries.

For Petit, given that fact-checking tools are not lacking and cannot solve everything, it is therefore necessary that large institutions, including media institutions, begin to promote "constructive doubt".

"The approach put forward here may seem paradoxical and likely to aggravate the problem: it would then be a matter of learning to doubt! But not anyhow. It is not a question of introducing the nihilistic doubt that applies to everything, without discernment, and that tries to pass off ignorance of the facts and of the mechanisms of communication as the most accomplished manifestation of the critical spirit. But the constructive doubt, that one which leads to a temporary suspension of judgment, while waiting for more thorough investigations to be carried out in a methodical manner."¹¹⁰

¹⁰⁹ Petit, Laurent. March 2022. To counter infox and propaganda, fact-checking is not enough

¹¹⁰ *ibid.*

Chapter 5: Conclusion

The Journalism, Media, and Technology Trends and Predictions 2022 study¹¹¹ concludes that during 2021, both journalists and the public experienced a kind of burnout caused by the incessant news and increasingly polarized debates about politics, identity and culture.

Meanwhile, in another analysis also conducted by the Reuters Institute for the study of Journalism and coordinated by journalist and digital strategist Nic Newman, the conclusion was that 38 percent of people around the world "often or sometimes" avoid the news; up from the 29 percent registered in 2017.¹¹²

Newman explained that this news fatigue has caused, among other things, declining media audiences in many parts of the world, which is far from an ideal situation "at a time when rigorous and reliable news is so important to human health and safety."¹¹³

According to Newman and his team, the main challenge for the media in the future will be to regain the attention of audiences that have drifted away from the news and to build closer relationships with regular news consumers.

The research also concluded that generational divides will remain an inescapable issue, as media will need to adapt quickly to citizens' new priorities in order to consolidate them or to reach new audiences. Climate change, mental health, diversity and inclusion are becoming inescapable topics and trends.

Meanwhile, according to Cision's *2022 State of the Media Report: Insights PR Pros Need to Win Over Journalists*, while primarily aimed at PR pros (press officers), the biggest challenge for journalists is in maintaining their credibility as a reliable source of information (32%) and in fighting the accusations of "Fake News."

Secondly, journalists cited the impact of reduced staff and resources on their workload. In fact, three in ten journalists (29%) write 10 or more stories per week.

All of the above illustrate the context in which international news agencies are navigating at the moment.

¹¹¹Newman, Nic. January 2022. Journalism, Media, and Technology Trends and Predictions 2022.

¹¹² Newman, N., Fletcher, R., Robertson, C.T., Eddy, K., Kleis Nielsen, R., Reuters Institute Digital News Report 2022.

¹¹³ op. cit.. p. 5

In this context, it is also important to consider the technology that continues to challenge content producers, both in the creation of news material and in the delivery of that material in the formats that are most suited to today's audiences.

Each of the four agencies studied here is facing these current challenges in its own way and according to its own financial and informational objectives.

Sophie Huet, AFP's global news editor, reminded us that in the immediate term, her agency must deal with the crisis affecting the media around the world - which are its clients - due in part to digital transformation and the decline of advertisement during the pandemic.

She said that Agence France-Presse, with its strong past, still needed to be flexible in adapting its model and organization towards digital transformation.

According to her, this transition must be done by producing content that is relevant in terms of format and content, and by orienting itself towards the needs of the large platforms (particularly news verification) that are capturing a growing share of advertising revenues.

On the other hand, Ms. Huet believes that AFP has no choice but to maintain an efficient network of journalists on the ground around the world, despite the high costs that this may represent.

Referring to the challenges being faced by every agency, not just the one she represented at the time of our interview, former Reuters editor Gina Chua saw that the short-term challenges for news agencies include the need to continue adapting and modernizing along with the advancing technologies to be able to reach new audiences.

News agencies must stay on course to meet the needs of their customers and provide information with speed, accuracy and insight, as well as distinct and differentiated content, she said.

Chua also saw the fight against misinformation and the erosion of trust in the news at large as the key issues being faced by the media industry as a whole.

When asked by our team, Ms. Chua did not mention the recently introduced Reuters pay model.

Indeed, in April 2021, almost at the same time that its new editor-in-chief Alessandra Galloni was appointed, Reuters announced the creation of a new subscription website as part of an initiative to woo professionals in the business milieu.¹¹⁴

In May 2021, the rollout of the new Reuters.com was delayed due to a dispute over the completion of the US\$27 billion sale of the former Thomson Reuters financial division, now called Refinitiv, to the London Stock Exchange Group Plc.

Under the terms of the deal, Reuters News was guaranteed to receive annual payments of at least \$336 million, through to 2048, to provide news and editorial content to Refinitiv.

Media analyst Douglas McCabe said he thought it would be difficult for Reuters to convince consumers to pay for content. "Reuters is a brand that many people recognize but don't intuitively go to"¹¹⁵, he added.

As for the Associated Press, its senior vice president for strategy, Jim Kennedy, believes that the most important near-term challenge for news agencies is centered around revenue growth.

Kennedy added that news agencies were facing the imperatives of digital transformation and innovation at a time when revenue growth is difficult and access to innovative technologies requires significant investment.

"Tech giants have become the primary venues for the distribution and consumption of information and have absorbed most of the advertising revenue that once supported media outlets."

According to the senior vice president for strategy at AP, GAFAMs have a direct impact on their customers within the media industry and an indirect impact on the AP's business as a content licensing agency providing these brands at retail.

At the same time, in the opinion of Jim Kennedy, news agencies must remain sensitive to algorithmic biases and commit to the ethical use of any AI technology they seek to adopt. They also need to be wary of the direction which giant technology platforms are orienting their AI technologies towards.

¹¹⁴ Li, Keneth. April 15, 2021. Reuters website goes behind paywall in new strategy. Reuters News.

¹¹⁵ Reuters editorial. Reuters names Alessandra Galloni as its next editor-in-chief. Reuters News.

As for Bloomberg, the sole financial agency, it is worth noting that it is planning a major global expansion in order to become relevant in different parts of the planet or to ensure its consolidation in this aspect.

In an interview with Sarah Fisher of Axios Media¹¹⁶, Bloomberg CEO Scott Havens said in July 2022 that his medium will not be able to grow adequately in terms of traffic and audiences if it does not also go deeper into national and regional topics.

Although the company can effectively grow its audience and engagement on a more localized level, he went on to say that its financial opportunities would grow exponentially.

Sarah Fisher assured in her article that the company had already begun exploring markets with relatively high gross domestic product (GDP) and regions where it already has a presence, including France, Germany, Japan, Malaysia and parts of Africa, as early as this year.

"However, this approach will depend heavily on technology investments," Havens said, including technologies to translate some of the global coverage to local audiences through dubbing and digital text translations.¹¹⁷

In our view, audiences are a critical aspect of analyzing the paid subscription model and the "Bloomberg terminal."

To date, Bloomberg's audience and customers have never been a traditional audience. Certainly, the general media pick up content from the agency and pass it on to their audiences, but it is fair to say that ordinary people do little or nothing on their own to consult the information offered by Bloomberg.

It is a media (and an agency) that targets an audience and media with the financial means to pay for the information, such as professionals.

However, as Tim Groot Kormelink explained in his recent article *Why people don't pay for news: A qualitative study*¹¹⁸, typical news consumers do not pay for news for reasons as simple as:

- Price (the most cited reason for not paying for news).

¹¹⁶ Fisher, Sarah. July 2022. Exclusive: Bloomberg Media plots global expansion. Axios Media Trends.

¹¹⁷ Ibid.

¹¹⁸ Groot Kormelink, T. *Why people don't pay for news: A qualitative study*. Journalism. May 2022. doi:10.1177/14648849221099325

- Sufficient information available for free, which creates a "self-service" mentality.
- Reluctance to engage or fear of missing out (FOMO) on other publications.
- Technical and delivery issues, such as registration and connection difficulties.

That's why Bloomberg's foray into the U.K. earlier this year was not at all trivial. The agency set up a newsroom in London from scratch with local journalists to compete with the local press. This is no small feat, and it shows, perhaps, the ways in which this agency is ready to move into the future.

In conclusion, it seems clear to us that now, and in the future, international news agencies will have to continue to demonstrate that their existence in the global media landscape remains relevant, while being open to a diversity of viewpoints and realities.

They will also have to be flexible and creative in order to always present themselves as reliable journalistic entities, while adapting financially and technologically to the world they represent.

Bibliographie

Agence France-Presse. 14 Avril 2021. L'AFP affiche une légère croissance de ses revenus commerciaux en 2020 et dégage un résultat net historique.

Agence France-Presse. 22 avril 2022. AFP : indicateurs au vert en 2021.

Agence France-Presse. D'abord les faits - Rapport annuel 2021. Édito de Fabrice Fries.

Associated Press. AP by the numbers (2021) Site corporatif. Récupéré le 6 mai 2022.

Associated Press. 29 mars 2022. AP releases new report on AI in local news.

Associated Press. 2017 CONSOLIDATED FINANCIAL STATEMENTS. Site corporatif. Récupéré

en mai 2022.

Associated Press. Leveraging AI to advance the power of facts. Site corporatif.

Associated Press. 10 janvier 2022. AP to launch NFT photography marketplace built by Xooa.

Associated Press. 21 oct. 2022. AP, Chainlink to bring trusted data onto leading blockchains.

Associated Press. AP by the numbers (2020). Site corporatif.

Ali Rafeeq & Shujun Jiang. 2018. From the Big Three to elite news sources: a shift in international news flow in three online newspapers TheNational.ae, Nst.com.my, and Nzherald.co.nz, *The Journal of International Communication*, 24:1, 96-114.

Alleyne MD, Wagner J. Stability and Change at the "Big Five" News Agencies. *Journalism Quarterly*. 1993;70(1):40-50.

Artero, J. & Morales, R. (2008). Opciones estratégicas de las agencias de noticias europeas: Reuters, France Presse y EFE. *Comunicación y Sociedad*.

Bernard, Louise et Patri, Alexis. Novembre 2021, *Droits voisins* : un accord historique trouvé entre Google et l'Agence France Presse.

Boulay, Léa. Mai 2021. L'AFP continue sa lutte contre la désinformation à l'international.

Botto, Marcelo Norberto. 2012. Historia De Las Agencias De Noticias. Historia Del Periodismo Argentino, Volumen VII. Buenos Aires: Academia Nacional de Periodismo, República Argentina. p. 95.

Britannica, The Editors of Encyclopaedia. "news agency". Encyclopedia Britannica, 28 Aug. 2015.

Bloomberg L.P. Research. News and Research. Site corporatif.

Bloomberg L.P. Pushing the boundaries on innovation- Tech At Bloomberg.

Christopher H. Sterling, News Agencies, Editor(s): Donald H. Johnston, Encyclopedia of International Media and Communications, Elsevier, 2003, Pages 235-246.

Clèdes-Flahaut, Charles. 2020. D'abord les faits - Rapport d'activité 2020. Agence France-Presse.

Daniel J. Edelman Holdings, Inc. Baromètre de confiance Edelman 2022 : La confiance au Canada.

Daniel J. Edelman Holdings, Inc. 2021 Edelman Trust Barometer.

Dang, Sheila. 2 août 2021. Twitter partners with AP, Reuters to battle misinformation on its site.

Enda, Jodi. 2011. The Bloomberg Juggernaut. American Journalism Review : Ajr 33(1):20–33.

Fédération internationale des journalistes. 06 mai 2022. France: premier accord sur les droits voisins à l'AFP.

Fischer Sara. 20 avril 2021. Exclusive: AP building local news collaborative. Axios Media Trends.

Fisher, Sarah. Juillet 2022. Exclusive: Bloomberg Media plots global expansion. Axios Media Trends.

Gray Calvo, Harry, Juin 2022, 'Journalism is under attack': Experts explain why it needs defending.

Groot Kormelink, T. Why people don't pay for news: A qualitative study. Journalism. May 2022.

Harman, Cameran (2021, September 8). Reuters leverages Instant Articles to support commercial and audience growth. Facebook Journalism Project.

Hayes, Adam. 2020. Reuters. Investopedia. Consulté au <https://bit.ly/3yRhw1r> le 21 mai 2022.

Geary, Johanna. August 2022. Bringing more reliable context to conversations on Twitter.

Jagati, Shiraz. Nov. 5, 2022. Blockchain in journalism: Winds of change carry media to new frontiers. Cointelegraph - The future of money.

Kapoor, A., Lowe, A. May 2021. Announcing the Reuters and Facebook Journalism Project e-Learning Course for Journalists.

Kulkarni, M., Mahata, D., Singh Arora, R., Bhowmik, R. Learning Rich Representation of Keyphrases from Text - ACL Anthology .

Li, Keneth. April 15, 2021. Reuters website goes behind paywall in new strategy. Reuters News.

Meta Inc. En France, Facebook s'associe à l'AFP autour d'une campagne vidéo pédagogique de sensibilisation.

Moon, Mariella. Jan. 11, 2022. The Associated Press will turn its photojournalism into NFTs | Engadget.

Muro Benayas, Ignacio. 2011. El papel de las Agencias de Noticias, una nueva mirada. Conexiones : revista iberoamericana de comunicación, ISSN 1697-3720, Vol. 3, N°. 2, 2011, págs. 37-48

Newman, Nic. January 2022. Journalism, Media, and Technology Trends and Predictions 2022, DIGITAL NEWS PROJECT.

Newman, Nic. June 15, 2022. Overview and key findings of the 2022 Digital News Report | Reuters Institute for the Study of Journalism.

Newman, N., Fletcher, R., Robertson, C.T., Eddy, K., Kleis Neilsen, R. (Juin 2022). Digital News Report. Reuters Institute for the Study of Journalism.

MacSweeney, Greg, March 2011, Inside the Bloomberg Machine. Wall Street & Technology.

McFarlane, Greg. April 2020. How Bloomberg Makes Money: Professional Services, Subscriptions, and Licensing. Investopedia.

Office québécoise de la langue française. 2017. Chaîne de blocs. Vocabulaire de la cryptomonnaie.

Paillé, P. & Mucchielli, A. (2016). Chapitre 1. Choisir une approche d'analyse qualitative. Dans : P. Paillé & A. Mucchielli (Dir), L'analyse qualitative en sciences humaines et sociales (pp. 13-33). Paris: Armand Colin.

Palmer, M. (2020). International News Agencies : A History, Palgrave Macmillan.

Petit, Laurent. March 2022. Pour contrer infox et propagande, le fact-checking ne suffit pas.

Potter, S.J., News and the British World, p. 87-88.

Reuters News Agency . International News Agency's Website. May 2, 2022

Rédaction Reuters. Reuters names Alessandra Galloni as its next editor-in-chief. Reuters News.

Roush, Chris. "Bloomberg News". Encyclopedia Britannica, 4 Sep. 2017, <https://www.britannica.com/topic/Bloomberg-News>. Accessed 7 July 2022.

Rinehart, A., Kung, E., March 2022. Artificial Intelligence in Local News A survey of US newsrooms' AI readiness. The Associated Press. p. 3.

Simply Wall St. Could The Market Be Wrong About Thomson Reuters Corporation (TSE:TRI) Given Its Attractive Financial Prospects?

Silvera, Ian. May 2022. Why People Really Pay for News - by Ian Silvera.

Sterling, Christopher H. News Agencies, Editor(s): Donald H. Johnston, Encyclopedia of International Media and Communications, Elsevier, 2003, Pages 235-246.

Thomson Reuters. Thomson Reuters brings the human touch to Artificial Intelligence. Site corporatif. June 2022.

Thomson Reuters. Applied Research in Artificial Intelligence | Thomson Reuters Website June 2022.

Thomson Reuters. Artificial Intelligence. Corporate Website, June 2022.

Young, Eric. A New Way of Looking at Trust in Media: Do Americans Share Journalism's Core Values?. p. 4.

WINDER, Gordon M. 2010. London's Global Reach? Reuters News and Network, 1865, 1881, and 1914. *Journal of World History*, 21(2). p. 273.