

bigbite

# WordPress in the newsroom

Scaling up editorial production

White paper



Unrestricted document

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# Introduction



At Big Bite, we enable many of the enterprise organisations that we work with - including Amnesty International, Octopus Group, Gumtree, and Macworld - to save valuable time and resources by empowering them to self-build and self-publish the most engaging online content for their worldwide readerships.

We also deliver ongoing services to News Corp, the global media powerhouse, as well as many of the internationally acclaimed newspapers it publishes, and by working closely with their editorial teams we've not only transformed their editorial workflows, we've also gained expert insight into the key challenges facing digital newsrooms today.

In this paper, we outline a brief history of the digital newsroom and examine how WordPress - the world's largest content platform - has evolved into a powerful solution that can overcome current publishing barriers, and dramatically improve and scale up editorial production for global newsrooms and content creators in an increasingly competitive industry.

# History of digital newsrooms



The origin of digital newsrooms stretches back to 1980, when the very first newspaper could be read online - albeit temporarily - however it wasn't until much later that the publishing industry really began to embrace modern methods of creating and sharing content.

Today, the vast majority of newspapers have a digital presence, with younger readers in particular demonstrating a clear preference for online news over more traditional formats. In the UK, the percentage of people who read online news, magazines and newspapers has risen from 20% in 2007, to 70% in 2020,<sup>1</sup> and in the US, more than eight in 10 Americans now access news via digital devices.<sup>2</sup>

We haven't just changed how we consume content, how we produce it has evolved too, with global teams able to collaborate more closely and effectively than ever before thanks to incredible technological advances within the digital publishing sector. Here we share some of the key moments over the last four decades that have shaped the digital news sector into what it is today.

1 <https://www.statista.com/statistics/286210/online-news-newspapers-and-magazine-consumption-in-great-britain/>

2 <https://www.pewresearch.org/fact-tank/2021/01/12/more-than-eight-in-ten-americans-get-news-from-digital-devices/>

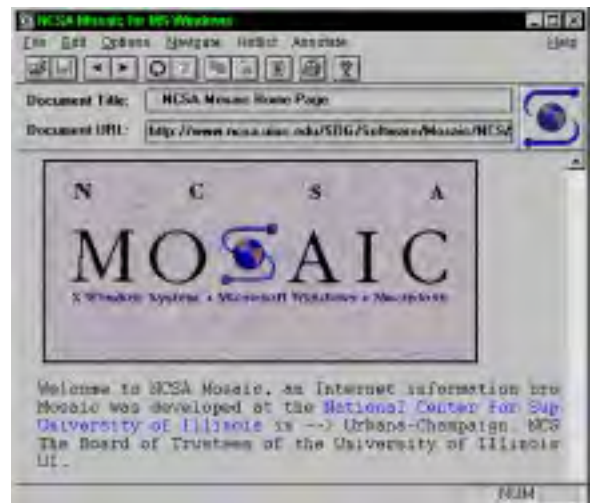
# 1980

The Columbus Dispatch became the first newspaper in the world that could be read online as part of an experimental project between CompuServe and Associated Press. This was later extended to the Washington Post, The New York Times, The Los Angeles Times and other AP members, however the experiment ended in 1982<sup>3</sup>.



# 1993

The Mosaic web browser - created by the National Center for Supercomputing Applications - was released, and quickly gained popularity due to being the very first browser to show both text and images on the same page together. Its popularity was overtaken by Netscape Navigator by 1995, at which point Mosaic was licensed by Microsoft to create Internet Explorer.<sup>4</sup>



The world's first journalism site was launched by the University of Florida.<sup>5</sup>

Nando, an internet news service, was launched by the News & Observer newspaper in North Carolina.<sup>6</sup>



# 1994

The Telegraph launched an online version of its newspaper - entitled the Electronic Telegraph - becoming the first UK publication to do so.<sup>7</sup>

3 <https://www.poynter.org/reporting-editing/2014/today-in-media-history-compuServe-and-the-first-online-newspapers/>

4 <http://www.ncsa.uiowa.edu/enabling/mosaic>

5 <http://iml.jou.ufl.edu/about.htm>

6 <https://en.wikipedia.org/wiki/Nando>

7 <https://corporate.telegraph.co.uk/about-us>

# 1996

The New York Times began publishing daily content at NYTimes.com<sup>8</sup> and today has over 2.8 million digital-only subscribers.<sup>9</sup>



# 1997

BBC Online was launched and went on to show the Queen's Christmas speech online for the first time later that year.<sup>10</sup>



# 1999

The Guardian newspaper launched its online version - Guardian Unlimited.<sup>11</sup>

RSS syndication was developed by Netscape, providing news feeds for subscribers.<sup>12</sup>

The Online News Association was formed.<sup>13</sup>

The Times and The Sunday Times created a digital presence.<sup>14</sup>

# 2000

Associated Press launched AP Streaming News to give AP members easy access to a multimedia 'real-time' audio and video news service.<sup>15</sup>

# 2002

El Pais, Spain's most popular news publisher, became the first in Europe to charge for online content.<sup>16</sup>

# EL PAÍS

8 <https://www.nytimes.com/1996/01/22/business/the-new-york-times-introduces-a-web-site.html>

9 [https://www.statista.com/topics/994/newspapers/#dossierSummary\\_\\_chapter4](https://www.statista.com/topics/994/newspapers/#dossierSummary__chapter4)

10 <https://www.bbc.com/historyofthebbc/anniversaries/december/bbc-website-launched>

11 <https://www.theguardian.com/gnm-archive/2019/nov/06/from-new-media-to-guardian-unlimited-records-of-the-guardians-first-years-online>

12 <https://www.britannica.com/technology/RSS>

13 <https://journalists.org/about/what-we-do/>

14 [https://en.wikipedia.org/wiki/The\\_Times](https://en.wikipedia.org/wiki/The_Times)

15 <https://www.journalism.co.uk/news/streaming-news-to-your-site/s2/a551/>

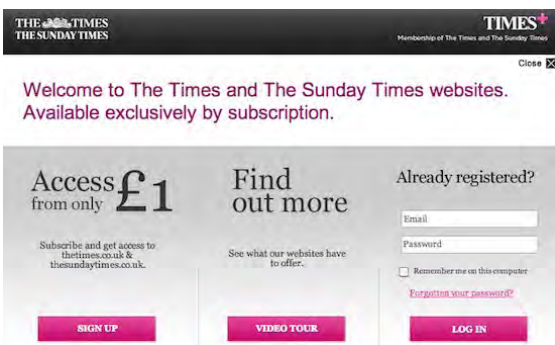
16 <https://wan-ifra.org/2021/07/how-spains-el-pais-drove-100000-digital-subscriptions-during-the-pandemic/>

# 2005

Several news blogs were launched including The Huffington Post, Mashable and TechCrunch.

# 2010

The Times and The Sunday Times began charging for content access across its sites.<sup>17</sup>



# 2018

Paid digital subscriptions for The Times and Sunday Times overtook paid print subscriptions.<sup>19</sup>

# 2020

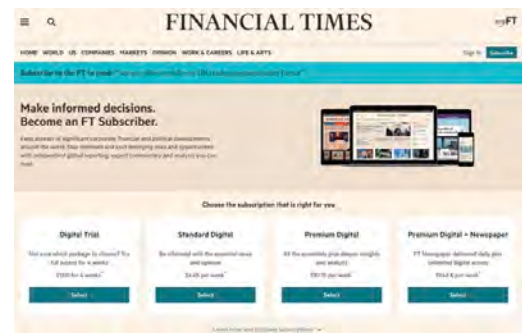
Digital surpassed print to become the second largest advertising medium after TV.<sup>21</sup>

# 2006

BBC News launched a blog for its editors.

# 2012

The total of digital subscribers of The Financial Times surpassed its print subscribers.<sup>18</sup>



# 2019

The Telegraph reported more paying subscribers online than in print for the first time in its 164-year history.<sup>20</sup>

17 <https://pressgazette.co.uk/ten-years-of-the-times-digital-paywall-how-murdochs-big-gamble-paid-off/>

18 <https://www.theverge.com/2012/8/1/3213020/financial-times-digital-subscribers>

19 <https://www.news.co.uk/2018/07/the-times-the-sunday-times-reach-500000-subscribers/>

20 <https://www.pressgazette.co.uk/telegraph-marks-huge-milestone-as-number-of-digital-subscribers-surpasses-print/>

21 <https://www.financialexpress.com/industry/technology/digital-surpasses-print-to-become-2nd-largest-advertising-medium-after-tv/1857934/>

# WordPress as an editorial tool



When WordPress was first released in 2003, it was initially developed by Matt Mullenweg and Mike Little as a personal publishing system to supersede b2/cafelog - a blogging tool that was no longer being updated by its creator. Today, WordPress is one of the top two leading platforms used by enterprise organisations and the most popular CMS system on the planet, powering over 43% of the internet.



## The rise of **blogging**

The activity of online journaling dates back to around 1994, with Links.net - a personal account of the life of Justin Hall - often cited as one of the first of its kind. The term weblog wasn't coined until 1997, and then shortened to blog two years later.

#1

leading CMS used by enterprise organisations

22

OVER

43%

of the web powered by  
WordPress

23

Initially, to publish any articles online bloggers needed to be able to write code from scratch, however a number of tools - including Pitas, Metafilter, Open Diary, LiveJournal and Blogger - soon became available to remove this requirement. When larger platforms such as Typepad (which was aimed at media companies) and WordPress (initially aimed towards individuals) became available, blogging evolved from a niche pastime to a more mainstream hobby.

Shortly afterwards, blogging gained commercial appeal after being adopted by a number of journalists, with a spate of news blogs launched between 2005 and 2010 including The Huffington Post, BuzzFeed, Mashable, TechCrunch, Business Insider and The Daily Beast. Traditional news sources such as BBC News also added blogs to their sites during the same period, and it soon became established as an essential component of the marketing mix for most brands. Today there are estimated to be between 500 - 600 million blogs worldwide.

22 <https://www.techradar.com/uk/news/wordpress-is-the-worlds-most-popular-cms>

23 <https://en-gb.wordpress.org/40-percent-of-web/>



## Adoption of WordPress as a CMS

While remaining an open source solution, WordPress very quickly evolved to include plugin architecture which transformed the platform for the wider development community. The approach enabled it to retain a core product with functionality that's useful for the vast majority of users, while also enabling developers to create further features to enrich it for specific publishing needs.

Following the addition of new and improved dashboards, more flexible themes, and multiple significant improvements and updates, the release of WordPress 3.0 in 2010 offered the ability for users to create custom post types - a groundbreaking step towards cementing the platform's position as a leading CMS. The introduction of APIs and multisite capabilities enabled developers to customise WordPress to meet a much wider scope of requirements, and just ten years after its initial release, WordPress became the world's most popular CMS - a position it's held ever since.



## Introducing Gutenberg



Released by WordPress in 2018, its Gutenberg editor took the publishing world by storm and revolutionised the content creation experience. The project was designed to give users the ability to create modern, media-rich pages and posts by providing an inherently more visual experience than the classic editor of the past, which relied on a more traditional experience of using a WYSIWYG editor, custom fields, shortcodes and widgets.

By embracing modern JavaScript - and in particular React - within the editor, Gutenberg bridges the gap between the editing interface and the front end, providing a visual representation of how the page or post will appear. This gives global newsrooms, including non-technical team members, the ability to build and publish websites, pages and content pieces efficiently, without heavily relying on development resources.

Big Bite was an early adopter of the Gutenberg block editor since its inception, and in just three years we've used it to dramatically increase global site production for numerous enterprise organisations, and transformed how world-leading news organisations produce content across a wide range of publications including The Times, the New York Post and The Wall Street Journal.

## WordPress as a headless CMS

A headless CMS enables development teams to create the front-end of a web application using any preferred web technology, while continuing to manage the content - including creating posts and editing articles - via the CMS. Content in a web application's database is accessed via a RESTful API, which acts like a waiter, taking requests from other systems and serving up requested data within agreed permission parameters. This increasingly popular approach gives developers more visual flexibility and means that teams and web applications aren't tied into a potentially restrictive native framework. It's also a strong method to futureproof content in a rapidly evolving digital landscape, because as long as API endpoints for content continue to exist, that data can be called into different front-end applications.

While historically WordPress has been tightly integrated with the front-end display of the sites it powers, through increased API access it's now possible to use it as a headless tool, capitalising on its extensive back end functionality while producing scalable and lightweight front-end solutions in whichever technology best suits the needs of your organisation.

# Using Gutenberg to overcome common challenges



By delivering ongoing services to some of the world's largest publishers, we've gained a wealth of knowledge on the challenges faced by many digital newsrooms that prevent teams from posting news as quickly and as seamlessly as possible.

In our experience, many issues are due to the limitations of archaic publishing systems and legacy solutions that have been implemented during the rapid rise of online news and have since become bloated, inflexible and outpaced by a fast moving sector, restricting and hindering production processes rather than supporting efficient workflows. In addition, restrictive software leads to reliance from editorial teams on imaging and development departments for content creation - this also slows down production which can be catastrophic in a competitive sector where timing is critical.

## Game-changing enterprise solution

Designed to help create media-rich pages and posts, the Gutenberg editor has fundamentally changed the way we approach designing and building enterprise websites and directly overcomes many of the key issues faced by global content creators, making it an exciting solution for digital newsrooms.

Similar to a design system, the editor is essentially a collection of reusable components - referred to as blocks - that can be customised to adhere to an established brand identity and assembled together to quickly and easily create web pages and posts. It offers unparalleled efficiency and scale to enterprise organisations, enabling non-technical teams to put together an entire site on a multi-site network in just a matter of days, all with uniform consistency, reducing reliance on design and development resources.

With Gutenberg, we were able to publish a breaking news story in **two minutes** versus five minutes in Classic WordPress.

JOEL - HEAD OF EDITORIAL OPERATIONS  
NEWSUK / THE SUN

## Editorial impact

The significant impact of Gutenberg within the global news sector is perfectly illustrated by News UK - a subsidiary of News Corp and an early adopter of the block editor. After streamlining its publishing workflows via Gutenberg, News UK reported a 30% reduction in the number of clicks to publish an article and an incredible 60% improvement in time to publish, freeing up journalists to focus on producing high quality content.



## Minimal UI

Gutenberg's streamlined drag and drop interface has a much greater focus on content, similar to other modern production tools such as Google Docs, Notion and Medium.



## Modular design

The block editor offers a modular method of creating pages and posts, enabling sections of content to be easily added, arranged, and rearranged as required, delivering a more visual and intuitive user experience.



## Blocks

Gutenberg's block-based approach to creating content enables users to produce more complex designs than ever before using simple elements, such as a page title to more content-rich functionality such as a gallery or a news feed.



## Post templates

With the release of WordPress 5.8 and Full Site Editing, Themes now offer the ability to create Templates and Template parts using the block editor, giving even more flexibility and control to the user.



## Rich media embeds

Gutenberg's embed blocks make it possible to easily insert content from third-party sources - including Twitter, Instagram, YouTube, Spotify, and Vimeo - into a WordPress site.



## Extendable functionality

Within Gutenberg, it's also possible to create custom blocks with bespoke functionality to meet very specific requirements, which we outline in further detail in the next section of this paper.

# Extending Gutenberg to improve editorial workflow



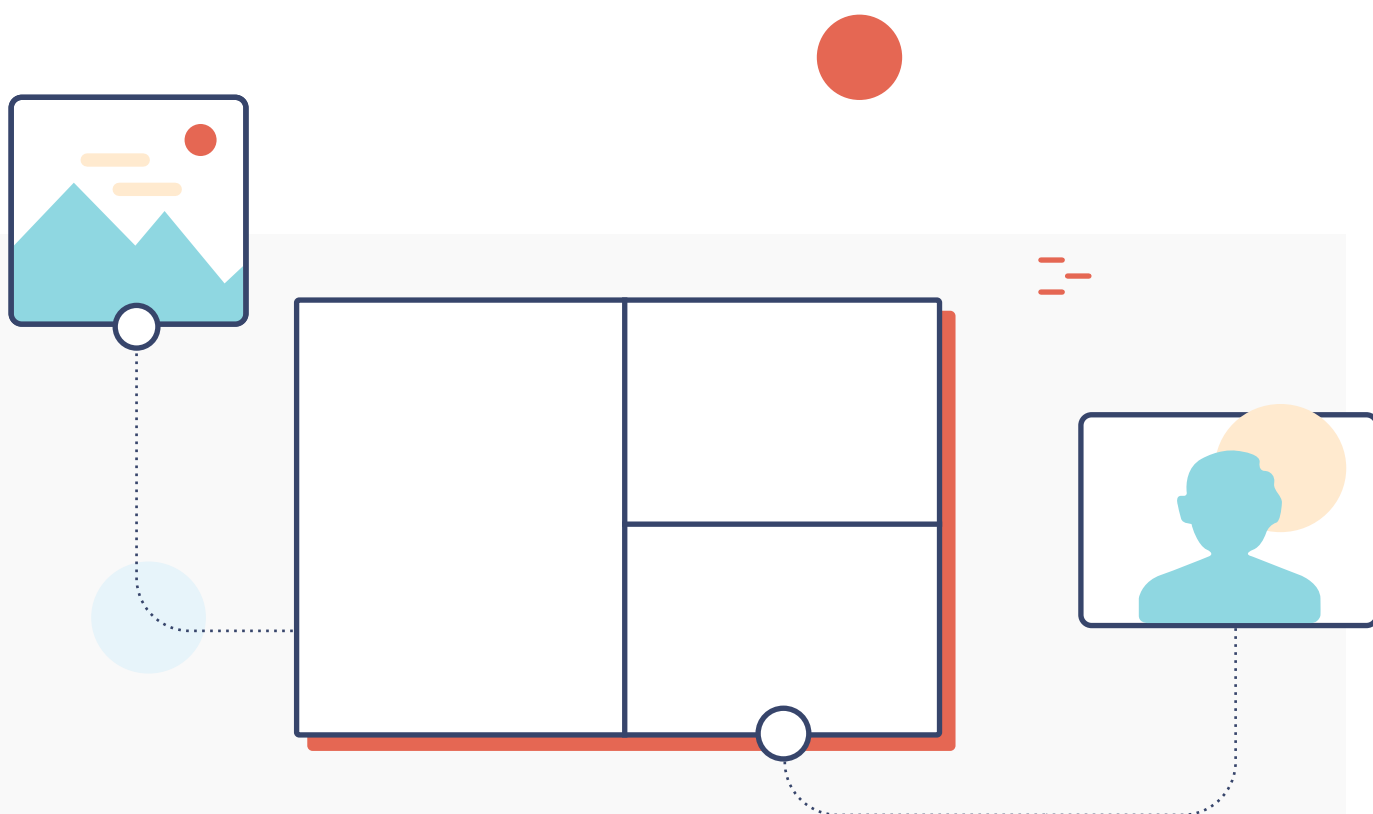
The Gutenberg block editor delivers unprecedented agility, enabling us to develop custom blocks, components, and tools on top of the WordPress platform to dramatically improve content production processes.

As a result, it's been adopted as a digital publishing platform by News Corp, one of the world's largest media powerhouses with editorial teams across all continents. News Corp uses Gutenberg as a base editor but also works with a small number of select agencies - including Big Bite - to develop a custom set of components built on top of WordPress, which are collectively known as NewsPress.

The multiple plugins, extensions, and components built within NewsPress can be shared across various platforms under the News Corp umbrella, such as The Sun in the UK, or Wall Street Journal in the US. Here, we've highlighted just some of the custom functionality we've developed on behalf of the enterprise organisation, highlighting how Gutenberg can be extended to meet the specific needs of global newsrooms.

## Collage Creator

With Collage Creator, editorial teams can put together collage images in a wide range of layouts, which significantly reduces reliance on photo desks and external imaging software, and subsequently speeds up the content creation process.



Via the tool's intuitive interface, users can select an initial layout for a collage from an extensive list of preset templates, and then populate it by adding an image into each section of the layout grid. They can also create a custom crop of every image they insert into a collage, repositioning and zooming in as required, and the tool gives them a live preview of any changes made so they can see the finished result at a glance before committing to any adjustments. In addition, Collage Creator can be used to overlay smaller images in various shapes on top of a single image or collage.

Custom crops can also be applied to overlaid images, and each overlay can be easily snapped into the ideal position using a nine-point grid.

Finished collages can be saved into the media library, or immediately added to a post or the homepage, and with Collage Creator a user can quickly add relevant meta values including a title, alt text, caption, description, and image credit.

The tool was exclusively developed on behalf of the New York Post and is one of many image management tools - including inline editing - that we've built within NewsPress.

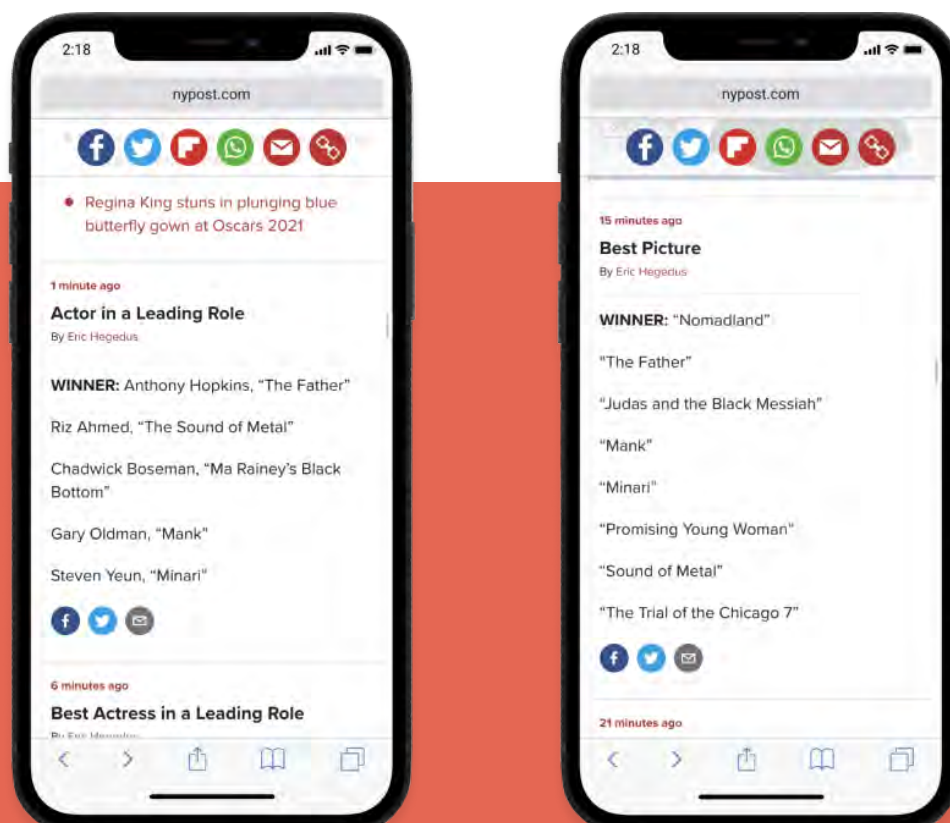
## Revisions

Building on an existing feature within WordPress, we improved the overall UX and enriched the revision functionality by making it possible for content creators to view a version history of content within an article. This means that whenever a post is saved by a user - or automatically saved while it's in production - a version is stored for reference, along with a flag of when an article has been published as well as saved.

## Liveblog

Also developed initially for the New York Post, the Liveblog plugin enables its editorial teams to quickly and easily publish news snippets in a real-time feed format without the involvement of technical teams and is the first of its kind on the WordPress platform. As well as posting news in a chronological feed format, including title and author name, entries are automatically time-stamped and individual snippets can be shared by users via Twitter, Facebook or email with the push of a button.

Liveblog was debuted by the New York Post while reporting on the 93rd Academy Awards in April 2021, detailing the winners of each category as and when they were announced throughout the course of the evening. The newspaper, as well as others within the News Corp publishing group, continue to use the functionality to provide live coverage of key events.





**Gutenberg** enables our editorial teams to interact with content in a much more visual way, which **simplifies** and **speeds up** the publishing process while also reducing dependency on our technical departments.

We also find that it **facilitates collaboration** better than any platform we've previously used, and by working closely with Big Bite, we can easily extend its functionality to suit our exact requirements and work patterns.

LUKE SIKKEMA - DIGITAL PRODUCT MANAGER  
THE TIMES

# Building a product for digital newsrooms



Big Bite has extensive experience in creating custom plugins and products for global content creators and newsrooms, and we follow a refined process that includes in-depth discovery to ensure that our work delivers measurable benefits to the enterprise organisations that we work with. Here we provide a brief overview of the main steps involved when building a product for digital newsrooms, using the Editorial Notes plugin which we developed on behalf of The Wall Street Journal (WSJ) as an example.

## Identifying the objective

As part of our discovery phase with WSJ, it was uncovered that its editors were unable to provide feedback or request changes directly against articles stored within their CMS. As a workaround, editorial teams were exporting content into an external editing tool, adding notes and requesting changes, making changes and requesting sign-off, and then eventually updating the version of the article on the CMS. This process was not only laborious and time consuming, but also vulnerable to errors as comments and amendments could be easily missed and lost through the process of copying content from one system to another.

The resulting objective from this discovery was to streamline the editing process with a specifically developed product that would enable editorial teams to carry out all aforementioned tasks directly within the CMS.

## Designing the solution

To overcome the uncovered challenges, we designed an Editorial Notes plugin to enable writers and editors to directly add, edit, reply to or delete comments against posts within their WordPress CMS. To further streamline content creation, the plugin also allows users to easily view all comments and conversations, and create overall comments against an article.



## Plugin development

Working closely with the client, we agreed on the minimum viable product, fleshed out user stories, and identified the base features from those stories. These included the ability to highlight any content and create a timeline event that can be used for tracking changes, as well as the ability to toggle features within created highlights. We also identified the need for flexible and custom features for other newsrooms, and developed methodology to allow sub-plugins to be created using the base features as an entry point.

After producing an initial prototype, our Development team worked together to deliver all of the technical requirements, and liaised with our Design & UX teams to strengthen the usability of the solution. Throughout production, we regularly presented back to the client for feedback, adjustments and progress reports and once we created the minimum viable product, it was thoroughly tested prior to release.

## Measuring the impact

The Editorial Notes plugin has saved an incredible amount of time for The Wall Street Journal editorial teams by further streamlining its content flow and reducing errors that previously occurred as a result of importing and exporting copy as part of the publication process. It is now also being utilised by further publications under the News Corp umbrella.

The screenshot shows a news article interface. At the top left, there are two note icons with the text "1 Global Note" and "1 Article Note". The main headline is "Tesla Model 3 enters sales chart at No 3". Below the headline is a sub-headline: "Electric car maker's results spur 20% rise in stock price; new products pose threat to margins". The author is listed as "By Jonathan Willis". The main body of the article contains the text: "Tesla's Model 3 car was the third most popular model in a defining moment for electric vehicles. The car was registered in August, more than the Ford Focus, and the Vauxhall Corsa. Only the Ford Fiesta and". A comment overlay is positioned over the article text. The overlay has a title "Note" and contains the following text: "Kirsty McMahon Please check that 20% is the correct figure." Below this text are two buttons: "Delete" and "Sept 27 - 2:54 PM". At the bottom of the overlay is a text input field with the placeholder "Add a comment ..." and two buttons: "Close" and "Comment".

# Looking ahead



While the fundamental purpose and value of journalism across the world remains unchanged, today the majority of readers of leading newspapers are paying for online content rather than print subscriptions, illustrating that the landscape of how news is created and consumed has radically changed over recent years.

Accelerated further by the COVID-19 pandemic, it's anticipated that we'll see an even greater expansion and investment in digital newsrooms throughout the remainder of this decade, as more publications adopt a contemporary approach to content creation that enables them to improve editorial workflows and compete against other significant news sources including TV and social media.

As the streamlined production of content that's engaging and timely is critical for success within the news sector, enterprise organisations that invest in scalable publishing software that delivers both efficiency and consistency will be best positioned to attract wider readerships and increased online revenue generation. In just three years since its initial release, the WordPress block editor, Gutenberg, has evolved to directly meet those needs, overcoming many of the practical, technical and logistical barriers faced by news teams through an intuitive content management system that's powerful, pragmatic, and fully extendable.

By continuing to work in close collaboration with publishing powerhouses such as News Corp to further innovate and enrich the Gutenberg editor, agencies including Big Bite are ensuring that it offers an unrivaled experience for readers and content creators across the globe, which along with ongoing updates to the core WordPress platform, are expected to secure its position as the leading solution for global digital newsrooms.

# bigbite

Big Bite transforms online publishing for global newsrooms and content creators through the delivery of scalable digital solutions and products, exclusively built on WordPress. We specialise in working with multi-faceted enterprise organisations that have lots of contributors, lots of content, and lots of challenges.

As industry leaders, and with strong relationships with the UK's premier WordPress hosting partners including WordPress VIP and WPEngine, we're trusted by some of the world's biggest brands and publishers to modernise, standardise and revolutionise editorial workflows, saving valuable time and resources and empowering organisations to self-build and self-publish the most engaging content for their global readerships.

*News Corp*

 Gumtree

THE WALL STREET JOURNAL.

**NEW YORK POST**

Macworld

AMNESTY  
INTERNATIONAL 

THE  TIMES

BARRON'S

octopus

Published by

**bigbite**

Our experience, combined with our involvement in the WordPress development community, positions us perfectly to demonstrate what can be achieved with Gutenberg for forward-thinking enterprise clients from around the globe.

**Want to know more?**

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