



# PRACTICAL AI FOR LOCAL MEDIA

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# INTRODUCTION

The hype surrounding generative AI is reaching fever pitch. You can find any number of DALL·E clones, ready and waiting to spit out images of dancing hamsters or ChatGPT text generators that can write anything from thank-you notes to PHD theses.

The over-excited conversations around these magical algorithms are all about how they can conjure content from nothing, either saving media or threatening its very existence. Meanwhile, back in the real world, AI is helping local media organisations research, create and publish important and useful journalism every day.

This report will sidestep the myths and misconceptions surrounding AI to find out what practical applications there really are for local news publishers. It spotlights use cases from publishers who have used AI to turn massive structured datasets into journalism that local communities can use, from property listings to high school sports reports, local views of national survey data to weather warnings.

## Report objectives

At *The Business of Journalism Summit* hosted by FT Strategies and the Google Digital News Initiative, Douglas McCabe, CEO of Enders Analysis, said: “The fundamental opportunity for publishers is to distinguish themselves from the rest of the internet.”<sup>1</sup>

AI in a local context can play a huge part in that differentiation, bringing local media organisations the opportunity to create useful and engaging journalism for tightly targeted local audiences.

In this report, we’ll examine:

- The myths and misconceptions surrounding AI
- What practical AI really looks like in local media
- The clear benefits that AI projects can bring
- How you can get started using AI

In five case studies from local news publishers around the world, we’ll see how AI has been used for years to create and publish journalism that gives local media an edge.

This report is for publishers intrigued by the opportunities that AI offers but don’t know where to start. We offer practical advice on identifying the problems you need to solve, planning your output and distribution strategies and making sure your staff see AI as an opportunity rather than a threat.

Finally, a huge thanks to our friends at **United Robots**, whose support has been invaluable in researching and writing Practical AI for Local Media.



**Peter Houston**  
Co-Founder, Media Voices

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### Podcast: Practical AI for Local Media

We’ve produced a special documentary-style episode of Media Voices featuring the voices of the publishers interviewed for this report. Hear the lessons, experiences and advice from local media leaders.

**Listen here** or search **Media Voices** on your podcast app.

# FROM UNITED ROBOTS

The team at Media Voices and I started talking about creating this report back in the summer of 2022. Little did we know that by Christmas, the news industry would erupt in discussions about the use of AI in newsrooms, at an intensity we've never seen before.

The launch of ChatGPT brought with it sudden awareness and lots of speculation about the possible good and ills to come of AI in the context of publishing.

United Robots has worked in this space for eight years now, deploying automated content as well as educating the industry on the values AI and automation can bring to the business of journalism.

From our standpoint, it's not about whether AI is the saviour or an enemy, it's about solving actual problems in local newsrooms like freeing up journalists' time, expanding local coverage and providing more relevant content to each reader.

Against the backdrop of the recent furore, I hope this report will constitute a source of steady, constructive and practical information for media companies, not least those who are at the beginning of their AI and automation journey.

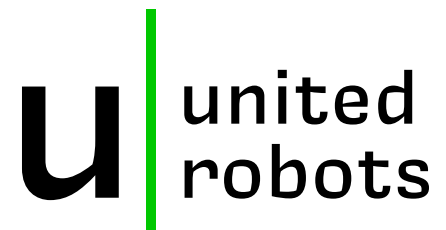
There is so much to be gained by taking a pragmatic approach to the topic. The lessons already learned by publishers and shared in this report is a perfect starting point.

Happy reading!



**Cecilia Campbell**  
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Newsroom resources are limited.  
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## CHAPTER 1:

# Myths & misconceptions

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Is AI a magic technology that will make all our jobs obsolete? Or will it be the silver bullet that 'saves' publishing? There are plenty of myths, misconceptions and exaggerations around the use of AI technology in media. Let's take a look at some of the biggest.



### AI is not magic

The hype around the release of Generative AI applications has more in common with alchemy than actual publishing. And while the promises around these developing technologies are not quite as hollow as ancient offers to transform lead into gold, they are almost as fantastical.

There is no Philosophers' Stone to secure immortality for local media organisations struggling with the day to day challenges of digital publishing. There is, however, a proven, practical set of tools to assist stretched newsrooms in their work to deliver content that local audiences will find useful and engaging.

Supernatural shortcuts might seem attractive but practical AI is a process. It sifts real-world data and shapes it into stories that people want to read, but the results are never perfect the first time. Trained journalists and editors need to do the work of training AI tools to deliver what their audiences need.

Cynthia DuBose, VP, Audience Monetization at McClatchy in the US, told us how newsroom staff are constantly training the bots they use to deliver automated content to make sure it is 'fully valuable' to their communities. "Our AI implementations are strong because of our editors," she explained.

ChatGPT levels of inaccuracy are not an option for local media outlets producing content that people rely on everyday. Human oversight is the only way forward.

To implement AI effectively, publishers don't need magicians on staff, just people that can teach the technology to do what they have always done.

### AI is not a replacement for journalists

For exactly the reasons outlined by McClatchy's DuBose, journalists are crucial to the effective implementation of practical AI. Practical AI is not a plug-and-play solution and newsroom input is fundamental to long-term success.

Yes, we're hearing stories all the time about generative AI creating end-to-end content based on limited text prompts. The problem is that half of those stories are about how the technology got it wrong<sup>2</sup>. ChatGPT levels of inaccuracy are not an option for local media outlets producing content that people rely on everyday. Human oversight is the only way forward.

Publishers are, however, using AI to create content quicker and at much finer levels of granularity than human journalists can. In the UK, PA Media's RADAR newswire fuses AI tools with journalism skills to craft localised data reporting from national statistics.

The stories are often placed with local titles that Editor Joseph Hook suspects don't have the staff to take on these types of trend and analysis stories.

Publishers can use RADAR's stories straight off the wire, however, Hook also sees a significant minority assigning reporters to put wire content in a local context. "We see papers picking them up and finding a local voice, a local organisation, to do that last bit of the job."

Smart publishers are using AI to double down on adding value, delivering unique data-rich information and analysis and comment from journalists freed up by automation. Publishers that see AI as a way to reduce headcount? They're likely to miss the opportunity to distinguish themselves from the rest of the internet that Douglas McCabe talks about.

### AI is not about technology

The mainstream press speaks about AI as if it is one single cutting-edge technology. In reality, it means many things to many people, as is pointed out in the AI Journalism Starter Pack<sup>3</sup> produced by the Journalism AI team at the LSE's journalism think-tank, Polis.

Charlie Beckett, head of the Journalism AI project, describes AI in journalism as a disparate collection of applications. The one thing they have in common is that they're all trying to help journalists cope with an overabundance of information.

"It's not about the technology," he explained. "We've got people who are trying to create products. They're trying to create tools, or very importantly, trying to see how that tech fits into a system that will use it in an efficient and effective way."

Working within established tech stacks is crucial in making AI useful to newsrooms of all shapes and sizes. The most automated content is of little value if it can't be delivered to the right people in the right place at the right time.

Cecilia Campbell, chief marketing officer at United Robots, explained that one of the most important parts of any AI project is getting content to where the publisher needs it to best serve the audience. "That could be apps or a tag in the CMS. You only get real value once it's inside the publisher's system."

Campbell recounted a presentation she saw from a startup working in natural language processing. "Stop," she remembered thinking, "Don't talk about all the intricate functionality. Nobody cares. Talk about the problem. That's where everybody should start their AI journey... Is there some problem that we can solve through this?"



*"AI is going to change how you think about your journalism. If the routine stuff becomes automatable... the onus is very much on what you can add. Can you add empathy, entertainment, insight, expertise, judgement, the human touch, creativity? All those things are going to be at a premium."*

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**Professor Charlie Beckett,**  
Director, The Journalism AI  
Project, LSE





## CHAPTER 2:

# What does practical AI look like?

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Some local media organisations have been benefiting from AI for years. Here's what it looks like in practice.



### Structured

In starting to write this report, I wondered why the Nordic countries are so incredibly well represented in AI applications. The answer, I was told, is that they have a lot of publicly accessible, well organised data and well organised data is the foundation of practical AI.

Elin Stueland, deputy news editor at Stavanger Aftenblad in Norway put it much more simply: “Crap in, crap out. If you have good data, that just solves everything. But if the data is chaotic, then you will never succeed.”

For some of the use cases mentioned in this report, data is sourced from commercial providers. In others, it is taken straight from local and national government sources. In the case of Stavanger Aftenblad’s junior sports coverage, it comes from the football league administration, with match reporting supplied by team coaches using a mobile app.

The one thing all the AI applications we looked at for this report have in common - property prices, sports reporting, weather updates - is that they are all founded on robust, reliable, structured data sources.

### Scaled

The other commonality for local media using practical AI is the sheer scale of the datasets it processes.

The ability to handle massive volumes of data is a key value driver in terms of ROI, in relation to both the volume of data processed and content output. It takes a content robot the same amount of time to create one, one hundred or one thousand articles. The more data you throw at it, the more content it can produce.

Traditionally, publishers have had to decide how narrow to go with their content before the limited scale of audience interest renders reporting commercially unsustainable. But with robots working on comprehensive local datasets, the level of granularity that can be served is potentially limitless.

Companies can use AI to filter property sales data to create top-10 lists of the most expensive houses in a broad metropolitan area. But they can also drill down into property sales for specific neighbourhoods and target that content to drive engagement hyperlocally.

Beckett at Polis listed a range of projects initiated by Journalism AI fellows looking to understand or add value to existing content, from fact checking to adding ‘context cards’ to news articles. He said, “That’s all about volume and, frankly, because a lot of the volume is being created by AI you need, as a newsroom, AI tools to be able to filter it and identify what’s interesting.”



*"If you have good data, that just solves everything. But if the data is chaotic, then you will never succeed."*

**Elin Stueland**, Online Editor,  
Stavanger Aftenblad



### Automated

It may be helpful to view a practical AI setup as similar to a commercial newswire service, but working exclusively in-house. The AI creates content automatically according to a set of rules determined by the publisher and the data available with the content created and distributed throughout established publishing systems.

The big difference between the AI and a commercial wire service is that output can be entirely automated to suit specific publisher goals, including subject matter, style, formatting and distribution.

For some publishers, the AI puts property sales information or junior sports reports directly onto the front page of their websites. For Dutch publisher NRC Handelsblad, AI automation is used to pull web stories into personalised newsletters.

The AI uses subscribers' behavioural data to automate creation and delivery of its midday newsletter. In a lineup of 12 stories, three will be trending that day, while the remaining nine are chosen based on individual reading histories.

As well as saving time and resources on newsletter creation and distribution, the introduction of personalisation has improved newsletter engagement. "We saw that people receiving this email were more active on a weekly basis on our website or our app," explained NRC's data and innovation manager Luuk Willekens.

### Layered

With enough training, AI will take raw data and produce individual texts that can be automatically distributed through established publishing systems. But it can also be used as the starting point for broader content packages and to alert reporters to opportunities for a good old-fashioned investigation.

Everyone loves a list and rather than only publish articles on individual property sales, Swedish news group NTM uses AI to compile articles on the biggest deals, region by region. Jens Pettersson, head of engagement & loyalty at the 100 year old publisher told us, "We do this week's highest value property sale and this month's most expensive properties. You can develop products by finding out what kind of robotics actually works for your audience."

We heard that AI content from PA Media's RADAR newswire is often the foundation for local follow ups and Pettersson said some of the content robots they use at NTM alert the human staff to interesting developments. "They are almost worth more as an alert," he said. "Hey, this house has been sold four times in six months and is getting more expensive every time. What's going on here?"



*"You can develop products by finding out what kind of robotics actually work for your audience."*

**Jens Pettersson**, Head of Editorial Development, NTM



## CHAPTER 3:

# The benefits of AI

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There are a wide variety of different ways AI can be implemented in a newsroom to help reporting, audience growth, engagement and more. Here are just some of the benefits local media organisations have seen from their AI projects.



### Doing more, faster

From data analysis to content creation, AI can do far more, far faster, than human reporters.

A 2022 audit conducted by LION Publishers, a US member organisation supporting independent news publishers, found that one of the group's biggest challenges was 'adding more editorial content without the operational infrastructure to support it.'<sup>4</sup>

That's exactly the problem McClatchy solved with its property bot. The publisher was creating content around property sales across several markets, but not on a regular basis. "If one of our reporters had time, we would have that information," said McClatchy's DuBose. "But if it was busy, we might go weeks without. The robot has allowed us to have regularity and scale in markets where we didn't have anybody pulling the information."

In other contexts, speed of delivery is crucial and robots are simply quicker. Pettersson at NTM used traffic reports to make the point. "We have one robot that works on traffic and it is so much faster than our own reporters. They will see an email in their inbox from the authorities telling them there's been an accident. They need to put that text into the CMS and get it on our website. The robot is instant."

The point with these use cases and the others we looked at is getting more content that matters to local audiences quickly. "It's about getting more journalism in those areas that we know make a difference. That's where the robots come in, they help us out with that," explained Pettersson.

### Delivering returns

Practical AI is all about ROI.

Stavanger Aftenblad was facing challenges in growing its subscriber base, with high rates of churn hampering growth. The introduction of junior football coverage allowed the team to deliver on the promise to deliver the best football coverage in Stavanger. Stueland said, "It's an endless promise so they just want to stick with us. Churn was lower from the start."

McClatchy has seen an increase in first time visitors, playing into ambitions for audience growth. DuBose estimates that two thirds of AI content readers are first time visitors. "Now we have an opportunity to drive them from that coverage deeper into our site and our reporter created journalism," she said. "It definitely helps with the growth piece, because it allows us to reach people that typically might not come and interact with us."

Looking at standard email KPIs, audience engagement is higher on NRC's automated newsletters than for those that are manually



*"We might go weeks without property sales coverage. The robot has allowed us to have regularity and scale in markets where we didn't have anybody pulling the information."*

**Cynthia DuBose**, Vice President, Audience Growth & Content Monetization, McClatchy



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produced. But the most important metric for Willekens is digital activation. He said, “This newsletter was more of a retention use case than to get more subscribers.” His team monitored specific subscriber segments over 12 months and saw that people receiving the personalised email were more active on a weekly basis than on NRC’s website or app.

### Expanding coverage

McClatchy’s property project allowed the publisher to extend its coverage in more newsrooms. It also supported new product development. Dubose, tasked with growth and monetisation, said the property bot gave her enough content to think about new offerings. “I could say, ‘Oh, can we build a newsletter now?’ And that’s a product that advertising can go out and say, ‘Hey, we also have a real estate newsletter’.

Stueland at Stavanger Aftenblad made to readers to cover junior football like it’s the Champions League. Without AI, it would never have been able to report on 7,000 junior matches every season needed to keep that promise.

In a similar vein, Stavanger Aftenblad uses AI to produce business reports at a local level.

Stueland said, “It might be really small businesses, but they have a great impact on their neighbourhood or city area. We’re closer to people with automatic journalism. That’s kind of thing I couldn’t think of that much before.”

### Freeing up time

Everyone we spoke to for this report said that AI saves time for journalists, enabling them to focus on adding real value. NTM’s Pettersson said, “AI frees up time for human reporters to bring along their analytical mind. The robot can do the boring work.”

RADAR’s Hook saw a huge amount of value to be brought through automation, simplifying processes, and doing a lot of the things in a local newsroom that ties people to their desks. “It’s freeing them up to go out and meet people... something that’s being lost a bit in journalism.”

Ahead of the arrival of 2022’s Hurricane Ian, the deadliest hurricane to strike Florida since 1935<sup>5</sup>, McClatchy built a hurricane bot. It used AI to scrape data from the National Hurricane Center and quickly created update articles.

AI saves time for journalists, enabling them to focus on adding real value. It can help get more content to local audiences quickly.



“That's not really journalism,” said Dubose, “Our journalists reported evacuations, city preparedness, other efforts. That's journalism that cannot be replaced by a robot.”

NRC's newsletter automation has saved editorial time in newsletter production. Prior to automation, manual newsletter creation could take two to three hours including story selection, choosing images, headline tests.

“This time is not needed now,” said Willikens. “And with the personalised layer, readers are reading more articles than in newsletters picked by the editorial staff.”

### Supporting storytelling

You don't know what you don't know and one of the things AI is really good at is surfacing stories that otherwise would have been missed.

Pettersson explained how NTM's property bot acts as a story alert for journalists and Stueland agreed. “I never thought of AI making us more capable of doing the things that we're really good at, but sometimes we don't know they're happening. We don't read all those lists of real estate sales. It gives us the ability to get closer to the details of people's lives.”

United Robot's Campbell spotlights the case of a robot reporting junior hockey for some sites in the US. “The robot picked up that one team, it was the first time they had won in 40 games. The editor didn't know that, but the robot found it and turned it into a headline.”

At RADAR that results in national stories being written with local relevance. Hook said the problem with traditional newswires is that it can be difficult to make stories relevant to specific publications, especially on a local level.

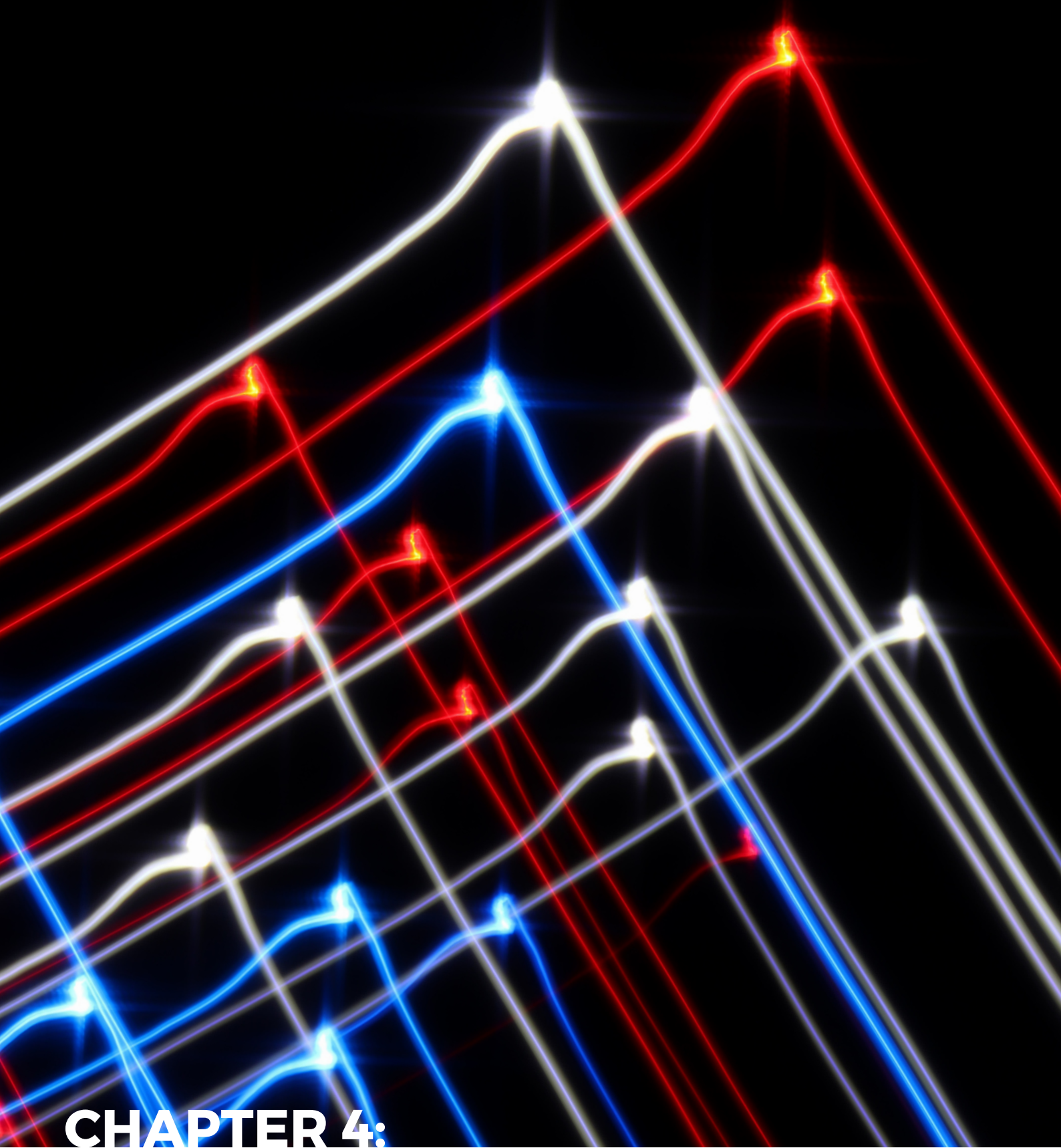
“We can pick up, not just a data set of the top level numbers, but we can dig into those numbers. We produce a specific version for every area that data contains. So if that's local authorities in the UK, we'll be writing 350 versions of the story in England - 400 if it's across the UK. We're making stories which are very tailored and personalised to papers' local readership.”



*“With the personalised layer, readers are reading more articles than in newsletters picked by the editorial staff.”*

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**Luuk Willekens,**  
Data & Innovation Manager,  
NRC Media



## CHAPTER 4:

# Getting started with AI

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Deciding where to start, both with identifying use cases for AI in publishing and actual implementation, can feel overwhelming. From securing data sources to getting colleagues on board, here is some advice from those who have already taken the leap.



### ‘Just do it’

With apologies to a certain well known sports equipment manufacturer, the best way to get started with practical AI is to ‘just do it’. Start with a smaller project, convince your newsroom that it will bring them and the publication real benefits, and get going.

But before you dive in, educate yourself on the basics of practical AI so that you can have informed conversations. Hook at PA Media’s RADAR said: “I think there’s a general misunderstanding over what AI means and I don’t think that the sort of rhetoric you hear about the likes of ChatGPT is necessarily helpful.”

The AI Journalism starter pack is an excellent starting point for beginners wanting to understand the huge potential of AI. The Journalism AI project developed the free online resource to help people at the start of their AI journey to begin exploring these technologies. Beckett said, “It’s a question of making sure you know a bit about AI first. Do a little bit of self education.”

### Find your people

It’s also a good idea to involve people that are at least curious about what AI can bring to your organisation, and that maybe shouldn’t be your IT department. “The best use of these technologies has been where you’ve got editorial engaged,” said Beckett. “Otherwise, you’re just going to waste a load of time creating a very shiny tool that nobody wants to use.”

Stueland agreed that it is important to bring the newsroom with you, to help them see that automated content will not replace their journalism. That is about highlighting the benefits AI can bring; surfacing stories in data, providing alerts on unusual activity, publishing updates at speed.

These all free up time in the newsroom for what DuBose at McClatchy called ‘real journalism’.

Start with a smaller project, convince your newsroom that it will bring them and the publication real benefits, and get going.

### Start small

Practical AI should be founded on realistic expectations, not ChatGPT-level hype and the general advice is to start small. Hook said to look for the small steps that can be taken to help improve processes. “Automate something you’re doing already,” he suggested.

Beckett, who has experience of dozens of AI projects since the Journalism AI project began in 2018, said it's best to start relatively small before you leap into something more strategic. "Get used to doing one or two projects with one or two technologies," he said, "But people do scale up very quickly. I'm really surprised how some news organisations, relatively small or medium sized, have said, 'Now let's go for it!'"

Campbell at United Robots said many clients start with data around a small area covering a few postal codes. That helps them understand what to measure, what's working and what's not working. "That's normally the model," she said. "They'll do a small and inexpensive pilot first."

### Problems, problems, problems

None of the people we spoke to for this report talked much about the technologies they were using. All spoke at length about the problems they were trying to solve.

Pettersson at NTM told us it is key to know your audience, their information needs, and the gaps you need to fill. He said, "What are your pain points? What do you need to change? Then you can see if these kinds of production approaches map into that. Can you solve some of this with robots?"

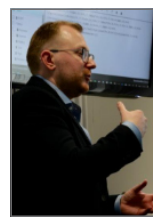
With Stavanger Aftenblad's junior football reporting project successfully reducing churn, Stueland frames things a little more positively: "I would start with seeing all the possibilities. As long as you have data, it's a never ending path of possibilities."

Willekens at NRC said AI has to help journalists or readers, ideally, both. "With our automated, personalized, newsletters we wanted to find ways to engage our readers more with our journalism and create more time for our editors to do other things."

### Secure your data sources

Data is the fuel that drives practical AI in local media. Whether the data sets used come from local and national government, for sports associations or from commercial data suppliers, securing a reliable source of accurate data is key. Remember Stueland said if the data is chaotic, you will never succeed.

Hook said the majority of the data RADAR uses is public data from official sources like the government and the health services. But they also use data from a handful of charities who are large enough to have localised data of their own and, following lockdown, used top-level data from payment card providers to show how spending habits were changing. "We could basically see people returning to pubs in every town," he said.



*"If you're hearing that AI is something you should be*

*using, it's about getting an understanding of what AI is to start with, what is encompassed within that, and what small steps can be done to improve processes in a workplace."*

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**Joseph Hook**, Editor,  
RADAR AI



Equally for projects like NRC's personalised newsletter project, integrating internal audience data with automation systems is crucial to delivering meaningful products and to support ongoing communication with users.

### Plan your outputs and distribution

The end point for your automated content is as important as the starting point. NTM's Pettersson said it helps to think through how and where automated content should be published.

NTM uses an algorithm to help editors control the front pages of its websites. As well as start and stop times, editors assign stories news values from one to six, depending how important the news is. Pettersson's team put threshold values on property sales and those over the threshold were given a high news value so that the algorithm will put them in a better position on the front pages.

"Try to be smart on how to visualise this kind of content in your editorial mix," he said. "So it doesn't just get put up on the bottom of the page. Use it as a true value for your customers."

Promotion is as important as presentation; publishers need to let people know that this new content is available. Campbell said, "You have to think the whole way through, 'How can we maximise what we get out of this?'. Somehow people think that success is built into this, the traffic or whatever. You can't publish and leave it, you have to treat it like any content, you have to promote it."

Promotion is as important as presentation. Publishers need to let people know that this new content is available and have a promotion strategy.

### Iterate against clear goals

Treating automated content like any other content means applying clear KPIs. Whatever your practical AI implementation is designed to achieve you need to measure its impact, from reducing churn to increasing engagement.

Everyone we spoke to explained the iteration processes they went through to get their automated content output to where they needed it to be. Stueland at Stavanger Aftenblad described changes made around player safeguarding, finding ways to report games in an interesting way without naming specific players.

Willekens explained how it was important to change newsletter story selection because too many opinion pieces were being included, sometimes eight articles out of the 12 in the newsletter.

Dubose said the promise to editorial teams was that automated content would never be published until they said it was ready. Training the bot to deliver text that was acceptable involved a lot of back and forth.

“They would edit it, it would go off, it would come back, they would edit it again,” she explained. “They would say, ‘Hey, we would never describe it like this. This is how we would write it.’ They were the decision makers.”

Pettersson advised a ‘just launch’ approach but not without measuring impact. “Get it out there and see the response from the audience. Follow up on a regular basis. What kind of effect does this give us? If we change this, do we get more people reading? Change one piece at a time and see how the audience responds. If they respond badly, change it back and try something else.”



*"You have to think the whole way through: how can we maximize what we get out of this? You can't just switch it on and leave it, you have to treat it like any content. You have to set KPIs, you have to measure, you have to promote."*

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**Cecilia Campbell,**  
Chief Marketing Officer,  
United Robots





## CONCLUSION:

# AI is a problem-solver

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Practical AI is a problem solver. It's about bridging resource gaps to let local media organisations fill information gaps.

Newsrooms, worried that AI will replace reporters, come to see that automated content is not journalism but a tool that can be used to help them serve their communities better. Readers don't care that the content they are reading is created by robots, just that they are getting interesting, useful, local information.

Willekens at NRC sums this up in his advice for deciding when to embark on an AI project, "Look through the eyes of the reader and the eyes of the journalist and see what advantages you can bring to both parties."

The case studies that follow show that those advantages are focused on delivering content at volume, quickly and with high levels of relevance to targeted local populations and even individuals. All that without the need for additional resources, quite the opposite. Reporters are able to leave their desks to get out into the community and build the local insights to deliver on the differentiation required to survive.

Beckett at the Journalism AI project said the next step for publishers using AI is to figure out what they can add. "Empathy, entertainment, insight, expertise, judgement, the human touch? All those things are going to be at a premium."





# Case studies

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Discover how Stavanger Aftenblad, RADAR AI, NTM Group, NRC Media and McClatchy are using AI to fill reporting gaps, grow subscriptions, personalise newsletters and more.



## Stavanger Aftenblad, Norway

### Reducing churn

Stavanger Aftenblad is a daily newspaper based in Stavanger, Norway, and owned by Schibsted Media Group. The paper faced the challenge of high churn among new digital subscribers. Online Editor Elin Stueland explained that it was common for people to register for a subscription to read an individual article that they had an interest in, but then cancel.

To solve this problem, the online team decided they needed a way to engage readers on an ongoing basis.

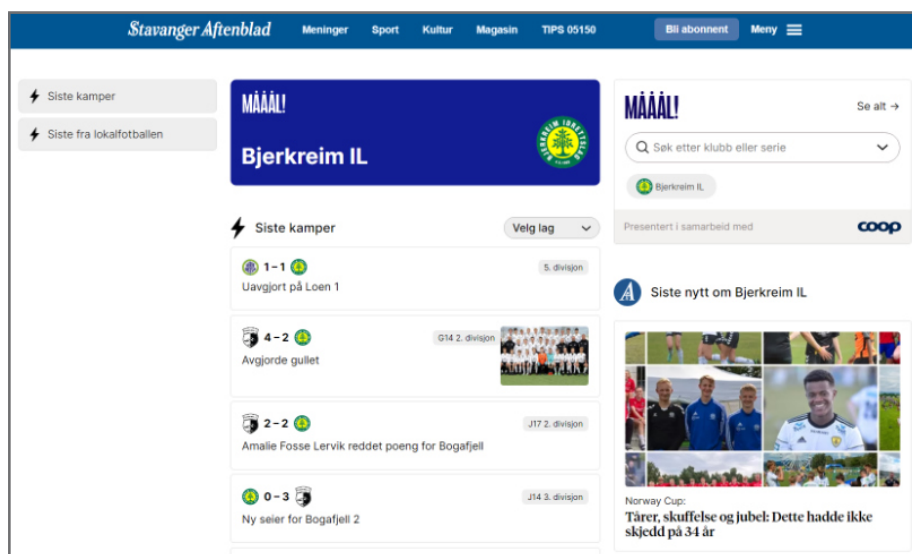
Local football reports provided the ideal opportunity. “In southwestern Norway, we have over 100 different football clubs, and more than 7,000 matches are played every season. Around 10,000 players are involved,” Stueland explained.

With potential audiences extending to family members, friends, and supporters all eager to follow their team’s performance, the challenge became how to cover so many games with limited resources.

The answer lay in a partnership between Aftenbladet and Norwegian news agency NTB. In collaboration, they developed a robot that could provide match reports using data provided by individual team coaches using an app supplied by the Norwegian Football Association. Coaches filled in team lineups and match information including goal scorers, suspensions, and substitutions.

In an interview with INMA, Stueland explained, “Through their open API, we can access all this data and feed it into the article generator. From there, the data is enriched with natural language to create articles.”<sup>8</sup>

Stavanger Aftenblad initially hired a full-time journalist to focus exclusively on local football. “We have added another because it worked so well,” said Stueland. “The promise was to cover local football like it’s the Champions League. It’s an endless promise, so [the readers] stick with us.”



One of Stavanger Aftenblad’s Mååål! portal pages, populated automatically with goals and key match details.

### Real estate and annual reports

Stavanger Aftenblad also has robots working in the areas of real estate and annual reports for local businesses. “That also works very well for us,” said Stueland.

She explained that automated journalism has given the paper the ability to get closer to the communities it serves, whether that’s house sales in specific neighbourhoods or annual reports for small, local businesses. “We’re closer to people with automatic journalism,” she said.

Stueland’s advice for getting started with AI is to see the possibilities rather than the challenges. “There’s so much data we could use for different projects like traffic, like weather. I think as long as you have data it’s a never ending path of possibilities. I would just try to start with a smaller project, and try to convince the newsroom that it’s a good idea.”

She noted that Aftenbladet’s newsroom is no longer worried about the introduction of AI, but initially they were sceptical of the value of automated content. They have since seen the benefits especially in alerting them to stories that they might otherwise miss:

“We’ve set up our alert system and we’ve made a lot of really good journalism. It’s that side effect - I never thought of it making us more capable of doing things that we’re really good at, but we don’t know are happening.”



*"It's a promise to our readers that if you're interested in this, you will have the best coverage in Stavanger... We're closer to people with the automatic journalism."*

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**Elin Stueland**, Online Editor,  
Stavanger Aftenblad



## RADAR AI, PA Media, UK

### Filling resource gaps

PA Media’s RADAR is a local newswire that combines AI and traditional news reporting to supply local media with data-driven stories that they often wouldn’t have the resources to cover.

Since it started in 2018, in collaboration with Urbs Media and with funding from the Google News Initiative, the service has delivered in excess of 600,000 local news stories. Its customers are local and national news publishers who subscribe to the service based on the number of local authority regions they require coverage for.

With a traditional newswire model it can be very difficult to make stories work for specific publications, especially on a local level. RADAR is different in that it creates local versions of stories from national datasets which can be broken down by area - local authority, police force, health service Trust. In the case of local authority data, that could equate to 400 versions of a single story.

Journalists at RADAR produce templates, which are used to format a version of the story for each area. “Often it’s a few templates because the type of story depends on what the numbers say,” explained RADAR Editor Joseph Hook.

For a story dealing with knife crime, for example, there might be three templates: one for areas where knife crime has dropped, despite it rising nationally; one for areas where knife crime has risen; and a third for areas where knife crime has reached a record high. “Each of those templates needs a slightly different way of telling the story,” said Hook.

### Natural language technology

RADAR’s reporters pick up the dataset, delve into the numbers and find the angle, then go out and get quotes. “They do everything a data journalist would do,” said Hook. The difference is they’re looking for a story for every area in the data, and then writing their stories in natural language generation software that allows them to produce multiple versions.



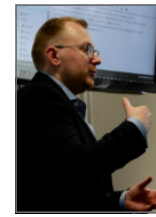
An example of a RADAR AI story, published in the Peterborough Telegraph with the relevant framing and statistics for the data.

RADAR's AI pulls through all the appropriate numbers for each area and uses natural language technology to make sure the content doesn't read like a 'mail merge'. "It does the things a local journalist would do if they were on that paper," said Hook.

The problem for many local papers is that they don't have the journalists to cover these kinds of stories. "A lot of local papers, specifically smaller local papers, are never going to be able to pick up these datasets," said Hook. "They might tell important stories about the area, but if you're a local journalist, the amount of time you have to sit and dig into a spreadsheet, anything other than just the very top level numbers, is beyond what you have time to do."

The content created by RADAR can be used as provided, but Hook said it is also used as the basis for further local comment. "They can either publish as is or take the numbers and the trends we've described and find somebody else to provide that bit of context and a voice... to do that last bit of the job."

Hook sees huge value in automation, simplifying processes and freeing time for journalists. He said, "It can do a lot of the stuff that ties people to their desks, freeing them up to go out and meet people, something that's being lost a bit in journalism."



*"Automation can bring a huge amount of value. It can simplify processes, it can free up time. In a local news-room, it can do a lot of the stuff that ties people to their desks, freeing them up to go out and meet people."*

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**Joseph Hook**, Editor,  
RADAR AI



## NTM, Sweden

### Growing subscriptions

Sweden’s NTM Group comprises 18 local news publishers throughout the country. In 2020 the group came together to set a common subscription strategy with the goal of doubling digital subscription numbers over a three-year period. The target was to go from 55,000 in 2020 to 210,000 in 2023.

The growth strategy relied on proving the value of local news. Head of Editorial Development Jens Pettersson said this involved identifying what readers value, strengthening relationships with them and creating habits. “Getting ready to double was like trying to speed up on all these pillars at the same time,” said Pettersson.

Pettersson said automated content is an important part of the project. He told the United Robots blog: “To create value for readers, you need good journalism and good employees. For us, that includes robots – they are fast, focused and productive.”<sup>8</sup>

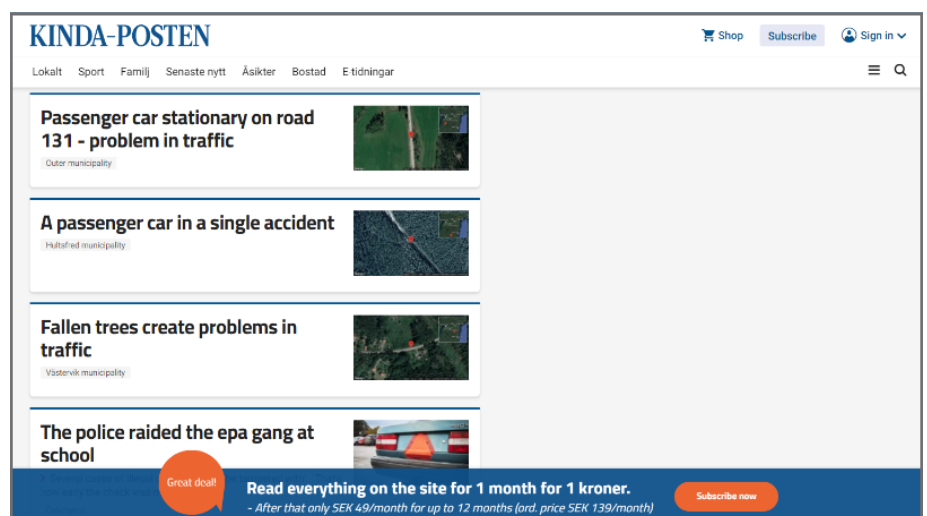
Spotlighting speed in particular, Pettersson gave the example of a robot that works on traffic updates. Reporters have traditionally created traffic reports in reaction to emails from local authorities, creating reports from the alerts and then uploading them to the CMS. “The robot is instant,” said Pettersson.

He described the robot as the ‘ideal coworker’ - fast, focused and with a very high capacity. “It’s about getting more content and more journalism in those areas that we know make a difference for subscriptions. That’s where the robots come in, they help us out with that.”

### Doing the boring work

Automated content delivers traffic volume at NTM. In 2021, NTM’s top reporter achieved 4.9 million page views compared with 9.4 million robot generated page views. But it is not replacing journalists.

Pettersson said by showing reporters the reader engagement benefits that come from content automation, they had come to see it as a valuable add-on to their journalism, taking on routine tasks to enable them to focus on the jobs they were trained to do.



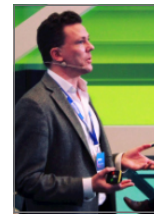
Instant traffic updates on one of NTM’s sites provided by AI.

“It frees up time for the human reporters to bring along their analytical mind,” said Pettersson. “The robot can do the boring work and then the reporter can look into that.” He explained that some of the AI tools NTM uses are most valuable as alerts. “This house has been sold four times in six months and it's getting more expensive every time. What's going on here? It's like a researcher for us in some senses.”

Pettersson said to get the most from AI it is important to analyse what automated content works for your audience. “In our case, it was very apparent that real estate text was important for our readers.”

He said that reader interest was justification for the project but also the trigger for looking at how presentation and formats could be improved.

“Could we present them in a better way on the front pages or websites? Instead of just publishing information on single sales, one by one, could we also do the week's highest valued properties? You can develop products by finding out what kind of robotics actually works for your audience.”



*"Automation and AI is important because it frees up time for the human reporters to bring along their analytical mind. The robot can do the boring work. And then the reporter can look into that."*

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**Jens Pettersson**, Head of Editorial Development, NTM



## NRC Media, Netherlands

### Automation and personalisation

NRC Media is a legacy newspaper publisher based in Amsterdam. The group has more than 20 newsletters and before the introduction of AI, all were created manually by the editorial team. AI was seen as an opportunity to both save time through automation and increase engagement through personalisation<sup>9</sup>.

Data and Innovation Manager Luuk Willekens explained that creation of newsletters could take up to three hours, from story selection, through choosing images and testing headlines. “With the automated newsletter, this time is not needed,” he said.

As well as automating newsletter creation, the AI has introduced personalisation. NRC doesn’t use tracking cookies on its site. Instead the publisher uses the reading history of subscribers to inform its personalisation efforts. The newsletter contains 12 articles, three are trending that day, nine are based on articles previously read.

Willekens said as well as saving time, personalisation is having an impact on audience engagement, showing improvements on standard newsletter KPIs from open rates to click throughs. “Readers are reading more articles from the personalised newsletters than in newsletters picked by the editorial staff,” he explained.

He outlined that digital activation was also an important indicator, as the newsletter was designed primarily as a retention driver. “We saw that people who were receiving this email were more active on a weekly basis on our website or our app than other subscribers. That was very positive.”

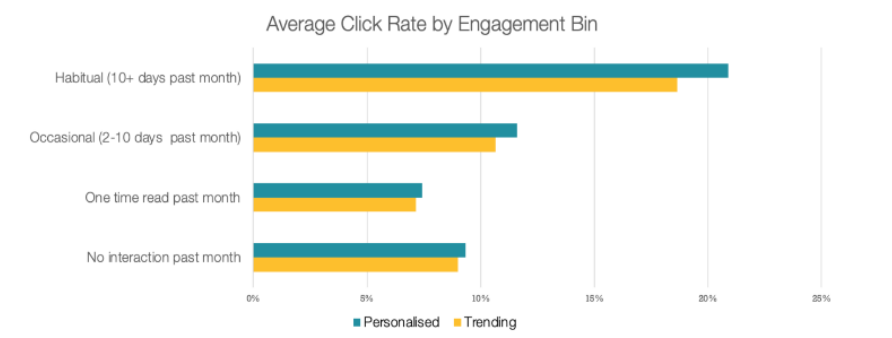
### Editorial input

Automation did not end editorial input into newsletter creation. Initially, newsroom staff had misgivings about the introduction of AI into the newsletter process, specifically around problems with story selection.

Willikens explained that NRC publishes about 120 articles every day, some long but many short, and several opinion columns.



The content on the plate matters, personalised being more effective than trending in increasing core readership



The results from NRC’s personalised email experiment. Chart via Twiipe Digital Publishing.

“Sometimes we saw, at the start, that if we had 12 articles in the newsletter, eight were columns or opinion. The balance was not that good.” He said that balance has improved and although each reader is only getting 12 stories per newsletter, almost 90% of articles published make it into a newsletter. “More articles are being served out.”

Editorial involvement in setting the right rules for story selection was crucial in improving the automated newsletter and Willekens said that editorial still challenges the output. “And I think that's a good thing,” he said. “They are a really important stakeholder in a project like this.”

He said in introducing AI, it is key to look through the eyes of the reader and the journalist to see what advantages it can bring to both parties. “I think AI has to fit your company's DNA,” he said, “But if you're working in the media and you can show that an AI project saves time for journalists, I think then that will be the success factor because that means that journalists can focus more on what they're good at, bringing the right content.”

“If they have more time for a good story, or time for more stories, I think that's very important for the future of a media company.”



*"The most important thing for us when we use AI is that it has to fit within our NRC DNA. It has to help either our journalists or our readers, and most of the time, both."*

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**Luuk Willekens,**  
Data & Innovation Manager,  
NRC Media



# McClatchy, United States

## Regularity and scale

McClatchy started its AI project in the Spring of 2022 and is now rolling out automated content across several markets<sup>10</sup>. The local news publisher could identify topics that were driving new audiences - real estate sales in particular - but it didn't have the reporter power to cover. Current AI efforts are focused on using robots to fill gaps in community information and deliver a more comprehensive local subscription offer.

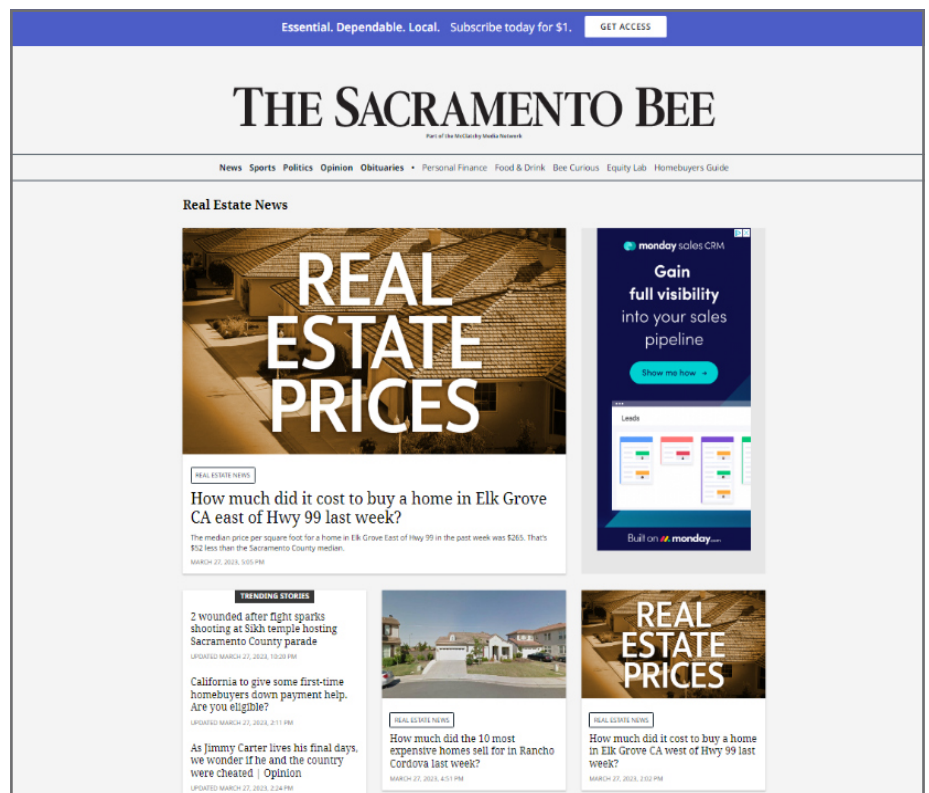
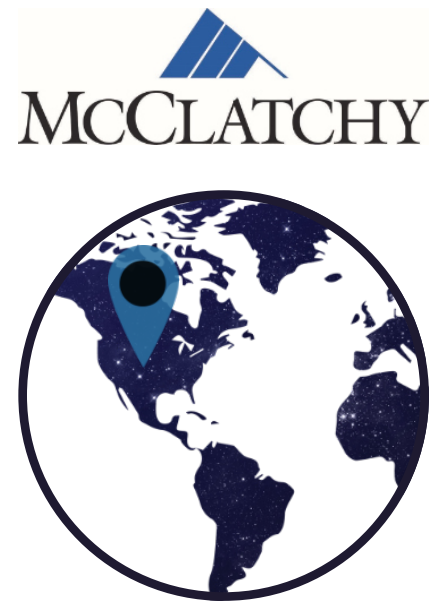
“Our problem was information gathering,” said Cynthia DuBose, VP Audience Growth & Content Monetization at McClatchy. “We were looking at what our audiences were engaging with and where were the opportunities? The biggest one that jumped out was real estate.”

DuBose explained that anytime the local teams wrote about real estate, the content attracted an audience. “People want to know what their options are and I think when you buy a house, it’s one of the biggest investments you’ll make. You’re always going to check on that investment.”

The team started to look at opportunities to produce that type of content at scale and, with structured data available across all the regions, McClatchy introduced a robot to report on property transactions in specific ZIP codes.

Reporters had created this type of property content in the past, but with no regularity. What the AI allowed them to do was to introduce regular coverage and at scale across markets.

“If one of our reporters had time to pull it, we would have that information,” said DuBose. “But if it was a busy week, then we might go weeks or a month without having it. The bot has allowed us to have regularity and scale in markets where we didn't have anybody.”



The Sac Bee Bot at work on one of McClatchy's local news titles

### Growth and monetisation

AI gives McClatchy additional content and the opportunity to introduce additional products. “The gap was not in real estate content,” said DuBose, “it was in scale and volume. She explained that once the newsroom was happy with what the robot was publishing she said, “Oh, can we build a newsletter now?”

Another benefit that content at scale brings is traffic, particularly first time visitors to fuel growth. “We now estimate that two thirds of our AI content readers are first time visitors,” said DuBose. “Now we have an opportunity to drive them from that coverage deeper into our site. It definitely helps with the growth piece, because it allows us to reach people that typically might not come and interact with us.”

DuBose pointed out that automated content is not a plug and play solution. “It’s ever changing,” she said, and keeping things moving forward relies on communication. “We have a really great director of AI experiences. She has weekly calls with our editors on the ground. Our AI implementations are strong because of our editors in the newsrooms.”

She said the starting point for introducing AI was meetings in local newsrooms, bringing together real estate reporters and editors to determine what automated content should look like.

“They looked at length, they looked at tone, they said, ‘Include these data points.’ They were training the bot... they might not say they trained the bot, they might tell you, ‘We were editing some really bad copy’”



*"We now estimate that two thirds of readers of our AI content are first-time visitors. We have an opportunity to drive them from that coverage deeper into our site... It allows us to reach people who typically might not come and interact with us."*

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**Cynthia DuBose**, Vice President, Audience Growth & Content Monetization, McClatchy



# FURTHER READING

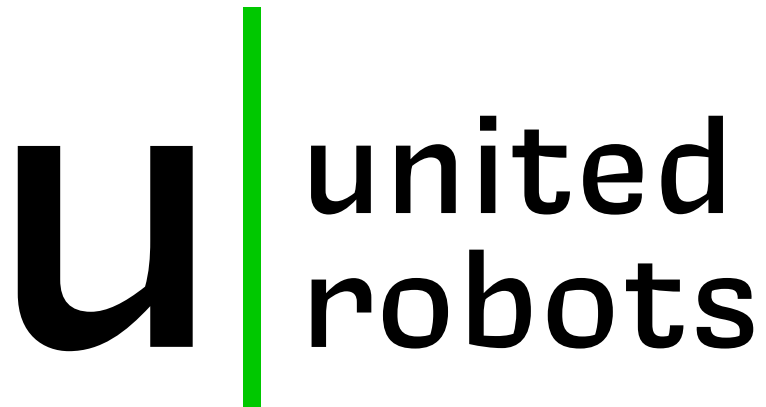
## Useful resources, blogs and articles:

- [TechScape: Seven top AI acronyms explained](#), *The Guardian*
- [Will AI destroy the media?](#) Charlie Beckett, *Tech, Power and Media*
- [Highlights from The JournalismAI Festival 2022](#), *JournalismAI*
- [AI can help media reach fragmented audiences](#), *INMA*
- [Smaller publishers risk missing out on the benefits of AI](#), *SpinyAI*
- [10 things you should know about AI in journalism](#), *GIJN*
- [AI tools for local newsrooms](#), *Airtable*
- [How Artificial Intelligence can help publishers thrive](#), *Woodwing*
- [What publishers need to know about AI](#), from Reuters Institute, *What's New in Publishing*
- [Is ChatGPT a threat or an opportunity for journalism?](#), *Reuters Institute*
- [How data may herald in a new era in local journalism](#), *United Robots*
- [A newsletter for every neighborhood](#), *Crosstown LA*
- [Journalism's future is here. Can we let go of its past fast enough?](#), *JSK Class of 2022*

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7. [Hey, local news publishers: Give the people a calendar](#), *Nieman Lab*
8. [Robots driving digital subscription value](#), *United Robots*
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10. [McClatchy discover the gaps to fill with automated content](#), *United Robots*

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