

The background of the entire page is a close-up, slightly blurred photograph of a map. Several red pushpins are stuck into the map, with their sharp points visible. The map shows blue lines for roads and some red lines, possibly indicating borders or specific routes. The lighting is soft, and the colors are muted, giving it a professional and thoughtful appearance.

united robots|

News automation white paper

Best practice for content automation in local media

The opportunity: Build your position as *the* valued hub for all your local communities

Newsroom resources are limited. Local stories are endless. Says Helena Tell, who heads up a five reporter newsroom in Sweden: “We’re forever prioritising and sometimes I feel all we ever do is choose not to cover things.” Tell’s newsroom now does what increasing numbers of local media companies do: use automated content to expand the local coverage and fill in the content gaps.

The trend started in Scandinavia 5–6 years ago and is now gathering steam widely – local publishers deploy robots to produce content. This is not about replacing reporters, it’s about complementing the quality journalism they do with all the community information that local readers expect. Some examples of what forms this might take (full scope of use cases in chapter 5, p 5 onwards):

Stories close to home. Thanks to the volumes of texts robots can generate, it’s possible to consistently cover all

house sales in all neighbourhoods, providing readers with the stories literally closest to home.

Incremental stories to build a full picture. By publishing short summaries of the annual reports of all businesses (with a turnover over any given amount), you can give your local business journalism a major boost of depth and breadth.

Increased inclusivity. With robots doing the bulk reporting, publishers can cover all games, all leagues, all sports – mens, womens, junior – driving engagement in hyperlocal communities.

Publishers who combine reporter produced quality local journalism with the many types of community information robots can generate, build relevance for local readers and businesses alike. And in doing so, can strengthen their position as a real hub for the community.

Read on to find out how.



Reporters

Brand & Mission

Community **journalism**

- › Editorship
- › Investigative journalism
- › Interviews
- › In-depth news stories



Robots

Breadth & Service

Community **information**

- › Basic volume reporting
- › Immediate deliveries / updates
- › Automated business effect(s)

The **value drivers** in the automation logic

Before we jump into how content automation can drive value for local media, let's take a step back and pick apart the logic behind it. Why would you decide to use robots in the newsroom?

Robots can generate huge volumes of content. They are fast, reliable and accurate. But they are robots. That – in a nutshell – is what news automation is about. Publishers who get real benefits from automation use robots for the content that can be automated, freeing up reporters to do the investigative, quality, human stories that underpin the journalistic brand.

Robots and humans, both, are focused where they have the most impact.

In the case of robots, it's about combining NLG (Natural Language Generation) with regularly published sources of structured data to deliver:

- > **Volume.** Wider, more granular and potentially hyperlocal coverage. Core value of automation.
- > **Speed.** Stories written in seconds, all at once and as soon as something happens.
- > **Consistency.** Regular and reliable data means always updated, latest information.
- > **Accuracy.** Robots don't make mistakes. If it's in the data it's in the story. If it isn't, it's not.
- > **Story discovery.** The robot analyses the data, picking up on unusual events or patterns. Can be used to build extended articles or as alerts for the newsroom to follow up.

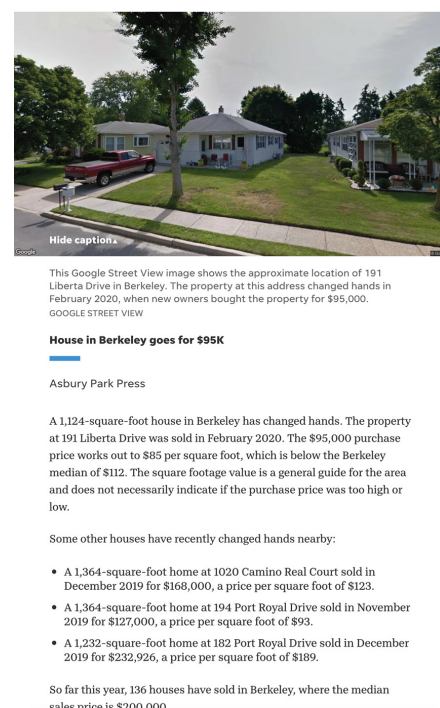
The above are the value drivers in the automation logic. When we move on to talk about the various best practice use cases for local media, we'll refer back to the value drivers at play in each case.

> In practice Regular content from reliable data

The raw material in the automated content United Robots produces is data – structured, reliable and regularly updated data. We work with professional data providers to source the data for texts as well as any images, maps or graphs we add to the automated content packages.

Our automated content products include e.g Sports, Real estate sales, Traffic incidents, Local business (based on annual reports), Company registrations and Weather and more.

We generate complete content packages (text, images and other enrichments, metadata) and send them to them to publishers' CMS. 90% of the content we provide to our customers, is automatically published to their sites (see photo) and apps, with no manual tasks involved.



A perfect storm of local opportunities

What makes a story newsworthy? The answer to that question used to be determined by newsrooms alone – the point of view was purely journalistic. Today, thanks to data driven journalism, a particular story's newsworthiness can also be gauged by its proximity to the individual reader. **In other words, stories closest to home are the most newsworthy. Robots are great at producing these.** The idea is simple – by serving readers content about their local community, publishers provide them relevance, driving engagement, and in turn traffic, ad revenue and even conversions.

In other words: In the news automation playbook, there is one main use case that delivers more effect than any other: **Serving local communities.** And that is because it combines to answer, in part, several questions:

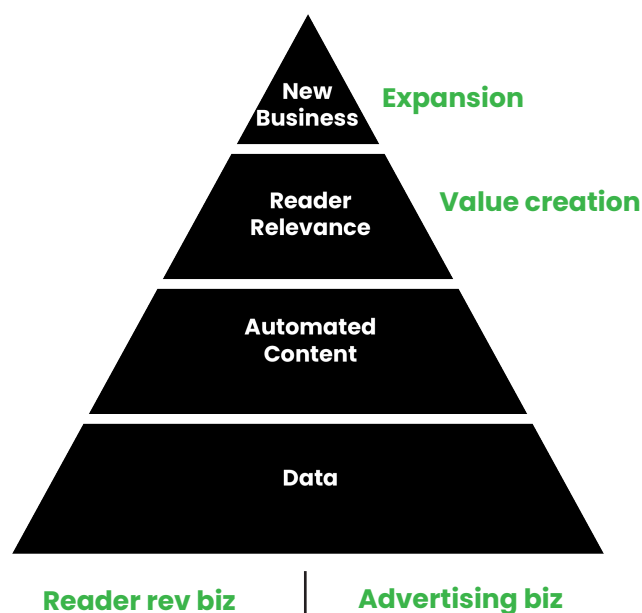
- > How do you make sure all of your readers get stories that are **relevant to them** and their communities on a regular basis?
- > How do you ensure that all local communities you cover **feel included** in your journalism?
- > How do you measure what types of stories your readers value? **Are there any gaps?**
- > How do you make sure you **cover all the local stories**, like new businesses and sports matches?
- > How do you compete in **hyperlocal advertising** markets?

In addition to these value creation opportunities built on reader relevance and associated revenues, automated content can also be used to **create new business** entities, such as entire topic verticals dedicated to e.g Sports or Real estate. Such efforts can help drive:

- > Presence in new markets
- > Audience development
- > Community engagement
- > Reader revenues
- > Advertising revenues, including at premium CPMs thanks to context.

On the following pages, we'll go through the main **Content Automation Local Use Cases** associated with serving local communities and creating new businesses.

The automated content value pyramid



A smörgåsbord of content automation use cases for local media

There are many ways to leverage automated content in order to drive various journalism and business effects. Here we go through use cases of half a dozen local publishers / publishing groups who all have a clear strategy behind their use of robots in the newsroom. Use them for inspiration and apply them to your newsroom / business imperatives.

› Use case 1 Free up journalists' time

Problem solved: With robots taking care of routine reporting, reporters have time to do the qualified journalism that supports the journalistic mission. The two combine to add value to the subscription offer and the news brand.

Automation value: You want to make sure journalists spend their time producing high impact journalism, not routine reporting. The automation value at play here is volume.

Publisher case: Bärgslagsbladet

Bonnier News Local publishes the local paper Bärgslagsbladet in Sweden. This is a newsroom of 5 reporters and one editor-in-chief. The newsroom uses robots to cover most of the local sports games as well as real estate sales, company registrations and traffic. According to editor-in-chief Helena Tell, being able to free up journalists from covering matches has been particularly impactful. These reporters now focus on stories that affect the wider community.



Helena Tell, Editor-in-chief

"For a small newsroom, automation is necessary. We're forever prioritising and sometimes I feel all we ever do is choose not to cover things. If we can use technology and automation to perform tasks as well as we reporters would, there's no doubt that's what we should do."

› Use case 2 Improve local coverage

Problem solved: With robots covering a number of topics in parallel: sports, company registrations, traffic news, home sales etc, all local communities can be covered regularly = hyper local relevance.

Automation value: Expanding local coverage is about filling in any gaps in the local reporting map, and thereby adding relevance for readers. That in turn, adds value to the subscription offer. The automation value here is a combination of volume and consistency.

Publisher case: Gota Media

Local media group Gota Media in Sweden does exactly this. They have worked extensively to get their metadata to a point where it supports distribution of the automated stories to the right readers across their 15 news sites. This is a publisher we often mention when the old question of whether robots are replacing journalists come up. One year after they started publishing automated content, Gota Media actually filled 25 new journalist positions in their newsrooms.



Peter Sigfridsson, Head of Production Development

"We're elevating our news sites with automated real estate texts as a foundation. We still have news deserts on the reporting map. With automated texts we ensure readers in these areas receive regular updates about local events."

6) 4,7 miljoner, Kalmar

Nu är det klart med försäljningen av huset på adressen Visionsvägen 5 i Kalmar. Priset blev 4 720 000 kronor och de nya ägarna tog över huset i maj. Byggår för huset är 2013 och boarean är 122 kvadratmeter.

Kvadratmeterpriset slutade på 38 500 kronor.



LISTOR: Dyraste husen i april – kommun för kommun:

Läs mer: LISTA: 7,1 miljoner kronor för dyraste huset i Kalmar i maj



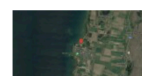
Läs mer: LISTA: Här såldes dyraste huset i Oskarshamns kommun i maj



Läs mer: LISTA: Här är huset som toppar listan – är dyrast i Nybro kommun



Läs mer: LISTA: Här är huset som toppar listan – var dyrast i Mörbylånga kommun i maj



Läs mer: LISTA: Här är huset som var dyrast i Borgholms kommun i maj



► Use case 3 Provide comprehensive coverage

Problem solved: In a local publishing context, offering blanket coverage of local sports can make you unique. With robots doing the basic game reporting, it is possible to cover all sports, always, and drive engagement in local sports communities.

Automation value: Sports is not something that all readers care about – but those who do, care a lot. The automation value here is primarily volume, but also speed – match reports can be published more or less at the final whistle.

Publisher case: NDC Media Groep

This is what regional publisher NDC Media Groep in the Netherlands have done. In the first post-Covid season, they decided to start automating coverage of local soccer games – all 60,000 of them. This is content completely unique to them, and their goal is to drive engagement in local communities. The automated match reports are free to read, but form part of NDC's reader revenue funnel, with engaged readers more likely to become paying subscribers.



Ard Boer, Sport Product Manager

"The complete coverage of local football is unique to us. That, combined with the crowdsourcing element, will drive inclusivity and engagement in the local sports communities, and by extension create value in our news brand."

Onder 15 competitie (najaar) 4e klasse 03
ONB wint in doelpuntenfestijn van Jubbega
Aftrap: 12:00 03/10/2020 | Publicatie: 14:30 03/10/2020

DRACHTEN - Een geweldige overwinning voor ONB in de thuiswedstrijd tegen Jubbega in de 4e klasse zaterdag. De wedstrijd eindigde in 7-2.

ONB heeft nu zes punten en Jubbega staat na twee speeldagen op drie punten.

In de volgende speelronde speelt ONB op zaterdag 24 oktober om 10:30 uur uit tegen RWF. Jubbega speelt op zaterdag 10 oktober om 9:00 uur thuis tegen RWF.

1		Gorredijk J015-2	3	3	0	0	9	19	8
2		ONB J015-2	2	2	0	0	6	13	4
3		RWF J015-2	2	2	0	0	6	8	3
4		Drachtster Boys J015-4	3	1	1	1	4	9	8
5		Jubbega J015-2	2	1	0	1	3	12	7
6		vv Stacircnfries J015-2	2	1	0	1	3	5	13
7		ONT J015-2	3	0	2	1	2	5	8
8		Harkemase Boys J015-2	2	0	1	1	1	6	9
9		Eastermar J015-1	0	0	0	0	0	0	0
10		S.V. Oosterwolde J015-2	2	0	0	2	0	4	13
11		SJO Feanstars J015-2	0	0	0	0	0	0	0

> Use case 4 Expand into new geographic areas

Problem solved: Expansion into new markets can be a complicated and expensive proposition. With automated articles as the bulk of content, new sites are easy to launch, and are constantly updated. This is a great way to reach new audiences and take ad market share.

Automation value: Volume and consistency are the obvious values here, with new articles on a number of topics regularly populating the new sites. Speed is another one – live traffic updates and match results at the final whistle help making the site relevant to readers.

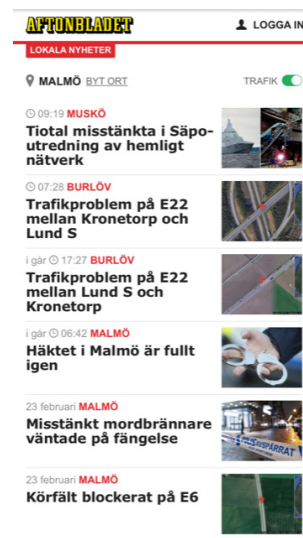
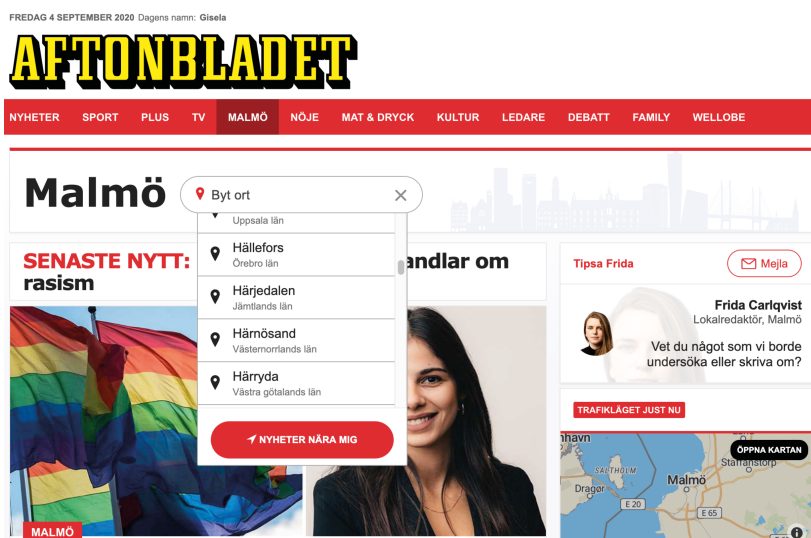
Publisher case: Aftonbladet

Sweden's top news site Aftonbladet has a staggering reach nationally; 4 mi daily uniques in a country of 10 mi people. Knowing there is a limit to how much more they can grow in terms of reach, they launched an initiative with focus on local communities around the country. Today, Aftonbladet has 230 local destinations (by municipality). With one or two exceptions, these local sites employ no reporters. Yet, through automated content, like local sports, traffic updates and weather, the sites provide local readers with relevant stories.



Martin Ekelund, Head of Local

“In order to keep our reporting as up to date as possible on our local sites, we need to complement reporter stories with robot generated content. That way we give readers the best possible service and the pages feel fresh and current.”



› Use case 5 Set up a sports vertical

Problem solved: Whether a new launch, or an existing vertical, with automated match reports as a foundation, expanding the coverage of a sports site can be done relatively easily and at low cost. The automated articles means the site always includes the latest results, while reporters can do the in-depth and human interest stories that drive engagement with fans.

Automation value: This is the full whammy use case! Volume, speed, consistency and accuracy all combine to underpin your great sports content.

Publisher case: Forum Communications

In 2019, US local media group Forum Communications set up the vertical The Rink Live to cover youth, high school, junior, college and professional ice hockey in the upper Midwest. In 2022, the site went live with automated match reports from two junior leagues. In parallel with the deployment of content automation, The Rink Live added reporters to focus on youth, juniors and prospects, as well as staff and resources to increase social media presence on TikTok, YouTube and Instagram, including through several new video shows. The additional staffing, the expanded unique content and the



deployment of robots, all add up to provide what The Rink Live describes as “more robust hockey coverage for fans.”

Says **General Manager Neal Ronquist**, “Nothing can replace the work of our talented journalists. Technology does, however, afford us unique opportunities to cover more teams, more players, in an efficient and creative manner.”



USHL

Musketeers win again vs Capitols

The Sioux City Musketeers hold the upper hand against the Madison Capitols, after winning 3-2 on road. Sioux City leads the series 2-1 and only needs one more win to clinch.

May 22, 2022 12:15 AM



USHL

Musketeers clinch series vs Capitols after overtime thriller

The 2-1 win on road in a game that went to overtime, sealed the series for the Sioux City Musketeers against the Madison Capitols. The result means Sioux City won in 3-1 games.

May 22, 2022 12:12 AM



NAHL

Impressive win for Titans

Three goals scored – and a shutout. The New Jersey Titans secured a home victory against the Anchorage Wolverines. The game ended 3-0.

May 25, 2022 01:15 AM

> Use case 6 Drive reader revenues

Problem solved: Reporting on every house sale in every neighbourhood can drive subscription sales – with the logic being that the news closest to home is the most relevant. In other words, people will pay to read about the house that was sold down the street.

Automation value: Robot written content drives conversions for many publishers. Automated real estate content is particularly good at this. The value in this use case is primarily volume.

Publisher case: Bergens Tidende

Norwegian regional publisher Bergens Tidende, part of the Schibsted group, have been particularly successful at driving reader revenues through automated real estate content. In the summer of 2020, they set up a Home sales vertical on their site. It's entirely populated with robot generated content. This content drives about a thousand subscription sales a year. And that is equivalent to 5% of all article conversions on the entire BT site.



Jan Stian Vold, Project Lead

"We achieve about 1,000 new subscriptions per year making the automated real estate content our most popular reader service. This is a brand new revenue stream that doesn't impact on the capacity of the newsroom."

Bergens Tidende BT Magasinet Sport Økonomi Meninger Bli abonnent Meny

Hus i Blomsterdalen solgt for 4.100.000 kroner

Denne boligen har steget ekstremt i verdi de seks siste årene

Ny eier til eiendommen i Londalsflaten på Espeland

What problem are you **solving** for?

As demonstrated by the use cases, local media companies are using automated content to solve for a number of different problems – and opportunities. When you deploy any type of automated content, a key success factor is having at least a hypothesis about how it is going to drive journalism and business effects – and that starts with working out what problem / opportunity you are addressing. Below is **how US local media group McClatchy set out on their automation journey, and why**. Note that you don't have to be a big media group to use the same logic and method.

➤ **Publisher case** McClatchy: “Identify your gaps!”

Problem solved: McClatchy identified gaps in the reporting – topics driving new audiences which the publisher didn't have the reporter power to cover. Robots were deployed for some of the bulk routine reporting of information topics like high school sports and real estate sales.

In the autumn of 2021, US local media group McClatchy went live with automated real estate content and automated high school game reports in seven of their markets. VP Audience Growth & Content Monetization Cynthia DuBose discusses how the decision to start using automated content came about, and what the key success factors for their pilot project have been.

The decision to start testing content automation in some of the McClatchy newsrooms followed “brainstorming to look at our gaps”, DuBose says. “What content and topics were audiences looking for that we didn't have?” The team realised that many of the topics driving new audience were information topics like real estate, high school sports, restaurant reviews – content the newsrooms did not have the humanpower to cover. “We want our journalists to produce journalism, not track



Cynthia DuBose, VP Audience Growth & Content Monetization

“It was really important for newsrooms to understand from the outset that this was **not a question of robot vs human**, more that it was a supplement to what we already knew worked.”

down information. They should focus on what they are skilled to do.”

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The upshot of the brainstorming was the launch of an AI project to **“engage with audiences new and old.”** In addition to the automated content on real estate from United Robots and high school sports from Lede AI, the group also deployed an AI tool for data visualization and one for AI powered social publishing. By the end of February 2022, the project was live in ten of McClatchy’s markets. To date, the result across the board has exceeded expectations in terms of weekly uniques.

DuBose lays out the broad strokes of how her team approached getting the AI project off the ground.

Step 1: Discovering the gaps

Cynthia DuBose points out that automation is not a goal in itself. “It’s great to say you want to start testing AI, but you need to work out what problem you’re solving for. For us, it was about bringing in more information – **we want to be a community portal, similar to the way print used to be.**”

The gap(s) in your newsroom could be any of a number of things, says DuBose. Such as:

- > Are you seeing **audiences gravitating** towards a particular topic you are testing out?
- > Do you need a higher volume of content in a **particular topic or geographical area?**

“Once you’ve identified a specific gap, you can figure out what type of test and vendor you should go for.” McClatchy did extensive research to work this out, drawing on resources such as NYC Medialab, as well as reaching out to newsrooms already working with AI and automation.

Step 2: Understand your capacity & culture

Cynthia DuBose emphasizes how important it is to work to your organisation’s strengths and focus when setting up an AI project.

- > **Be strategic about where you launch** the project. For McClatchy, that meant the slightly bigger newsrooms, with capacity to handle the extra work.
- > **Set your goals.** “Don’t start any of this without knowing what it is you’re going to measure.” The KPIs could be around the number of page views or uniques you’re driving. But it could also just be the volume of incremental pieces of content that you need to produce to e.g launch a new product. Cynthia also points out that McClatchy analyse results for the robot written texts in the same way they would reporter produced stories. “The distinction is not between whether it was written by a robot or a reporter, but rather on what topics perform well at certain times for example. And the thresholds for stories that perform well in terms of reach are the same for automated and human produced content.”

Reporters & Robots working together

At McClatchy, reporters and robots are working in tandem in some newsrooms, with robots producing information and journalists doing the journalism. McClatchy is now taking the reporter-robot collaboration one step further. “We’re creating a new product by packaging the journalists’ stories together with the top house sales information. That will give us a really nice, layered newsletter for people who are interested in real estate.”

Together, reporters and robots drive value for readers – and for McClatchy.

Strategic distribution drives the value

In local publishing – in any news publishing – there is a key step between the content and the business and that's the consumption. Understanding the content consumption and what drives it, is fundamental to deriving value from automated editorial content. The consumption KPI is measured in a number of ways, including pageviews, time on page/site and how many clicks readers do to further content. There are two ways to drive the consumption KPI: a) by providing content that's **relevant to the reader** and b) by **optimising the distribution** of that content. In other words, with the website being your vehicle for distribution, you want to increase the number of actions readers take while there. With a high volume of automated texts on topics such as sports, real estate sales and traffic incidents, local publishers have an opportunity to **get particularly relevant stories to the right readers at the right times**. This is where the value of content automation lies.

Matching the content to the readers

The key to strategic distribution of the automated content lies in the metadata – the metadata associated with the content as well as the reader.

With first party data on readers generated through subscription/registration or in apps, publishers have a way to track users. This can then be matched with the content. Let's use real estate content as an example. The articles can either be tagged per neighbourhood, or be geopositioned. Knowing where a reader lives,

it's then possible to push only the geographically most relevant house sales to each person, engaging them.

Another way to match content with readers, is to track user behaviour on the site. By running a script on the website, a publisher can e.g. track the fact that a particular reader clicks on content relating to a particular sports team, and push relevant stories.

The handshake between the content metadata and the user metadata is key to derive value from automated content. Once that is in place, publishers can start to work out how to best distribute and promote the content. Below are some best practices from our current publisher partners.

Ideas for distribution & promotion

Content distribution is key to driving value. Without good distribution, the automated content will not fulfil its potential in terms of driving consumption KPIs. These are some of the strategies in the distribution playbook. Start simple:

Set up a topic section. Host e.g. real estate articles in a dedicated site section, vertical-style. That way the content has an easy-to-find home and can be mixed with reporter-written stories.

Drive discoverability. With the section as a base, surface relevant stories in a box or carousel on the home page, by linking on article pages or through new channels like newsletters (see below).

Go hyper local. If you have the possibility, publish articles in hyper local subsections. For publishers like

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Gota Media in Sweden, this has become a path to success. Use the metadata to get the distribution right.

Create a publishing timeline for each reader. For timing sensitive content like sports, automated content allows you to engage readers in different ways before, during and after match day. Use the content metadata combined with reader choice to create one timeline for every reader (see next page).

Reach in hyper local clusters. Publishers like Swedish EverySport and NDC in the Netherlands have a strategy of building reach in small clusters of very engaged readers at local level. Again, use the metadata to get the right match reports in front of the right reader.

Let readers set their area. Try out what Swedish publisher Aftonbladet does and let readers actively choose the geo location in which they live to get a local tailor-made mix of content.

Newsletters. Some of our publisher partners have developed new newsletter products off the back of automated content. McClatchy in the US combines reporter written real estate stories with hyperlocal house sales in a new real estate newsletter. Sports content is also well suited for distribution in newsletters, where match reports and stats can be delivered according to readers' team preferences or active newsletter subscription choices.

There are other creative ways of distributing, and while you'll see good results in the first phases of distribution, you'll learn that the more accurately you distribute large volumes, the better the return on investment.

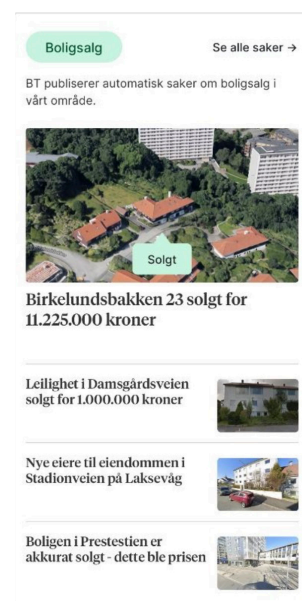
➤ Promotion example Real estate discoverability

We know from publisher partners that automated real estate content is very popular with readers. We also know that strategic promotion of this content can double its consumption, driving conversions and retention as well as ad impressions. Some best practices from Scandinavian publishers:

Home page exposure. Make the real estate content easy to find, by publishing a linked top ten list on the home page or a personalised section with house sales near the reader. Don't hide the content away!

Link to more texts on article pages. Give interested readers more of what they came for. Link to further house sales articles in the same area, or provide a link to all real estate content.

Set up a search engine. Let readers find the house sales that interest them by providing a search function for addresses.



Automated content revenue calculator

News automation should be part of a **calculable business strategy**, either from launch or during the course of publication.

We've provided automated content to news publishers in Scandinavia since 2016 and have good knowledge of possible business value.

To the right, you can see how some of our customers calculate the value of our products, This overview is based on current best practices for local media companies in Scandinavia.

Whether you pick reader or advertising as revenue – or both – as proof of value, is up to the case and your needs.

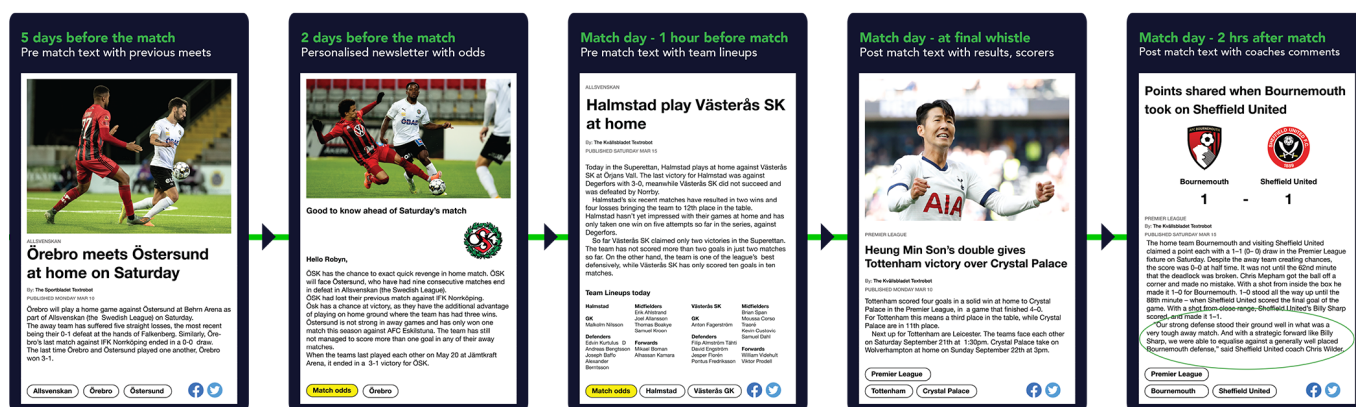
We do recommend any publisher who deploys automated content to keep an eye on the numbers. We're more than happy to provide benchmark figures and guidance.

Advertising revenue	
Total pageviews/month	
Pageview/Ad serving ratio	
% on robot articles	
CPM	
Ad revenue robot articles	
Subscription revenue	
Total article conversions/month	
Article conversions robot articles/month	
Subscribers fr robot articles/month	
Subscriber LTV	
Subscriber revenue robot articles	
Total value / month fr robot articles	

Enter data in green fields, calculate from there

Personalise for performance

Personalisation can be a driver of conversions as well as retention. Automated content provides ample opportunities to engage through personalisation, e g: Combine content metadata with subscriber choices to set up a publishing timeline for every reader, allowing them to follow their favourite team before and after the match.



Content automation **without the heavy lifting**

United Robots offers automated content-as-a-service, which means we build the robots and send the automatically generated content they produce straight to your CMS, sites or apps. We take care of all the technical issues, which means no particular technical expertise is required at the publisher end. We take full responsibility for maintenance, securing accurate and reliable delivery at all times. Just find a passionate editor or journalist to work as the project lead, and let our team take care of the rest.

Our content-as-a-service features include:

- > Taking care of data – knowledge, research, availability
- > Personal onboarding – unique text concepts
- > Streamlined and personal integration with CMS
- > 24/7 support and maintenance
- > Continuous improvement of products
- > Success support and problem solving

Want to learn more?

Visit unitedrobots.ai

or contact

thomas.sundgren@unitedrobots.ai

The United Robots **launch sequence** at a glance

