FT STRATEGIES

ARTIFICIAL INTELLIGENCE DESIGN SPRINT

Impact report

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FOREWORD

Google News Initiative is proud to sponsor this programme as part of our ongoing partnership with FT Strategies. Together, we have supported more than 500 publishers in over 50 countries across topics that include Reader Revenue, Data and Product.

We continue to collaborate with the news industry in creating, testing and implementing new ways to reach readers in the digital age. We recently launched a series of AI-related programmes to meet the growing demand from publishers as they navigate this rapidly changing space.

Artificial intelligence presents an opportunity for publishing and media organisations and we are excited to keep on collaborating with industry experts such as FT Strategies in supporting the delivery of programs such as the first AI Design Sprint in London.

FOREWORD FROM GOOGLE

SULINA CONNAL, MANAGING DIRECTOR FOR NEWS AND BOOKS PARTNERSHIPS FOR EMEA GOOGLE

"The Financial Times and Google are aligned on a vital mission to take a bold and responsible approach to the opportunities that AI creates. With FTS' deep understanding of news publishing, and Google's expertise in AI, we're working together to enrich knowledge of the AI landscape. Today's event is designed to bring together great minds to explore the opportunities available to us, and discuss the issues that need working out."

INTRODUCTION

Artificial Intelligence (AI) will have a huge impact across most industries, and journalism is no exception.

The most successful newsrooms have always been those who can adopt and adapt new technologies to suit their purposes. Digital transformation has dominated the agenda across newsrooms for the last two decades; AI tools and applications are likely to do the same in a shorter time frame.

AI refers to a broad range of technologies, some of which date back decades. At its most basic, it is "the ability of machines to carry out intelligent tasks typically performed by humans" - this covers everything from basic automation to the cutting edge world of "generative AI" which can create text, images, videos and audio from user input.
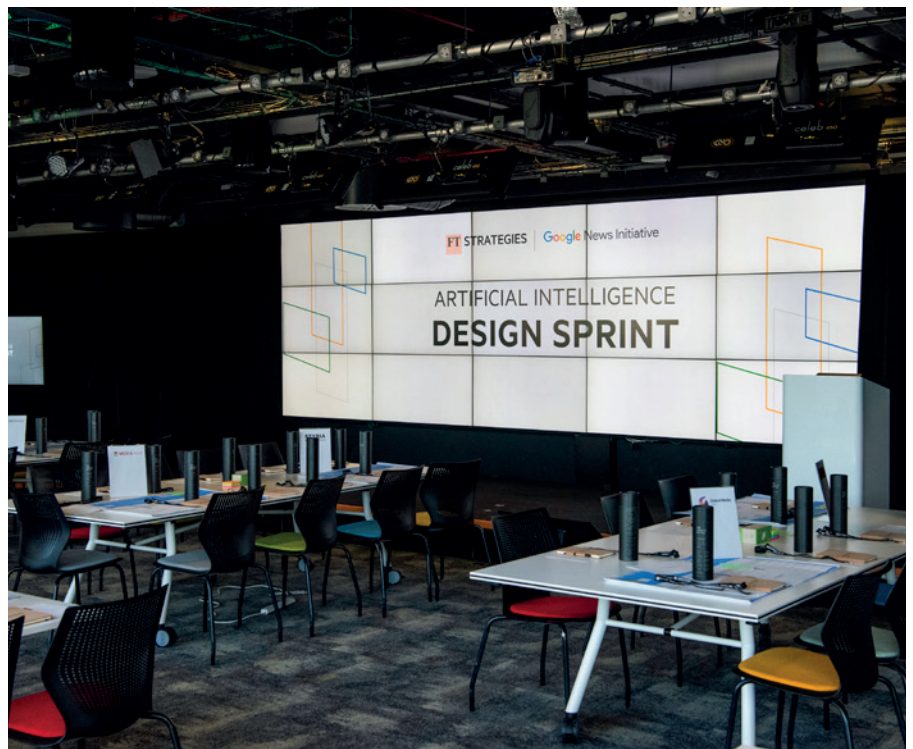
These use cases, popularised by models such as OpenAI's ChatGPT or Google's Bard, are evolving on a daily basis.

A survey conducted by FT Strategies in September 2023 found that 42% of news media and publishing companies are actively using AI in internal or customer-facing processes. An additional 42% are experimenting with the technology.

There are a range of opportunities for news businesses who are willing to engage with its potential. Early adopters can benefit from discovering both the limitations and capabilities of the technology; those who refuse to engage are at risk of being left behind or failing to find a niche which differentiates them from competitors.

> The programme was the first time I saw something about AI relevant to the media...I've seen a lot of AI things, but it was really helpful [to have something] so focused on what's relevant [to me].
>
> TEAM MEMBER, DIE ZEIT

At the same time, there is significant uncertainty around this new technology, not least in a field such as news production where it could have major repercussions. Bias can lead to errors in stories and undermine readers' trust.

Synthetically-generated images and videos can help speed up production in newsrooms but these capabilities are also being exploited by malicious actors; and these fears are feeding into the regulatory landscape with legislators and watchdogs around the world trying to understand the technologies and create appropriate safeguards. Journalists are also concerned that increased automation could lead to job losses.

Google and FT Strategies' belief is that AI should not be treated as a panacea or a gimmick, but as a powerful technology with its own costs and benefits. Nor is it a one-size-fits-all tool - individual publishers have different needs and different opportunities based on their existing resources.

For organisations looking to implement AI, a repeatable and structured process is important. In November 2023, FT Strategies brought together cross-functional teams from 19 publishers at Google's central London headquarters to run an AI Design Sprint. This was a full day workshop which provided them with a way to make tangible progress using AI to support their business.

KEY FINDINGS

KEY FINDINGS

Based on the outcomes of the Design Sprint and our wider work with with news companies and AI experts, Google and FT Strategies identified the following themes relevant to publishers looking to implement AI: systemic analysis of capabilities, collaboration, language and geography, size, novelty, organisational impact, ethics and risks.

1 **Assess the full range of AI capabilities**

- Publishers should begin by assessing a clearly defined business problem rather than looking for an issue that specifically requires AI to be solved.

- Although generative AI has received the most media attention given its capabilities, simpler use cases can boost productivity significantly. Tools such as automated transcription can be relatively cheaply integrated.

- However, in the longer term, the most successful publishers will seek to differentiate themselves from competitors by carving out a niche, such as using proprietary data to train a language model.

- Companies should consider AI as a part of their holistic business strategy. Focusing on crafting a specific AI strategy risks putting time into an approach which can quickly become obsolete.

2 **Collaboration**

- Even publishers who are currently experimenting with AI said that they found it rare to have senior executives together to discuss AI. All parts of the organisation should be involved in the process as automation has possible use cases across the board.

- There is also significant value to speaking with other news organisations in settings such as the Design Sprint. One participant said challenges were "reassuringly similar" across newsrooms.

3 **Language and geography**

- The current crop of generative AI systems are mostly produced by US companies, and are far better at producing content in English. Publishers based in non-English speaking countries may struggle to make use of generative AI.

- For example, Slovakian publisher Petit Press said that generative AI systems did not provide content of sufficient quality in Slovak, although they expected them to catch up within a few years across newsrooms.

- The fact that most of the major generative AI systems are built by US companies also means that ideas of AI safety, responsibility and ethics have a US-centric focus. This may change over time as new systems enter the market.

4 **Size**

- The size of a company can impact their ability to implement AI, constraining the adoption of more expensive use cases. For smaller firms, it may be cheaper and more useful to use open source and low or no-cost options rather than devoting limited time and resources to building systems in-house.

■ As AI systems continue to proliferate and are increasingly commodified, it is likely that more will become available on a regular basis. However, smaller publishers are likely to be at a disadvantage around generative AI as the data-sets which they own are likely to be more limited.

5 Novelty

■ Publishers were aware that the technology is at an early stage of development, and that over time some of its limitations and drawbacks will reduce.

■ There is considerable regulatory uncertainty about the nature of AI. Existing regulations such as GDPR already have an impact on the use of data - organisations should be alive to this debate but this should not stop them from experimenting with the technology.

6 Organisational impact

■ Advances in AI may mean that existing workflows are no longer fit for purpose or can be replaced with more efficient alternatives. Companies should assess this before looking to use automation to increase their efficiency.

■ This could however pose risks to journalists' existing jobs and potentially create friction within the newsroom if there is no focus on upskilling.

■ AI initiatives can be run either centrally or dispersed in teams throughout the organisation. There are examples of either approach taken by major newsrooms - publishers will have to assess which is more relevant on an individual basis.

7 Ethics and risks

■ Discussions of AI safety and AI ethics have become increasingly common in recent years, and journalism is not an exception. Publishers should ensure that "doing AI" and "doing AI responsibility" are not treated as separate considerations.

■ Training data in major generative AI models has been found to use copyrighted material. This means using these systems has inherent legal risks.

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FRAMEWORK

FRAMEWORK

In preparation for the full-day Design Sprint held in November, FT Strategies and the Google News Initiative provided the cohort of 19 publishers with four "Inspiration Sessions" - presentations delivered by AI experts, covering topics including an introduction to the technology, risks and ethics.

Participants were also provided educational materials and frameworks by the FT Strategies consulting team to ensure a base level of understanding and encourage participants to hold internal discussions about AI.
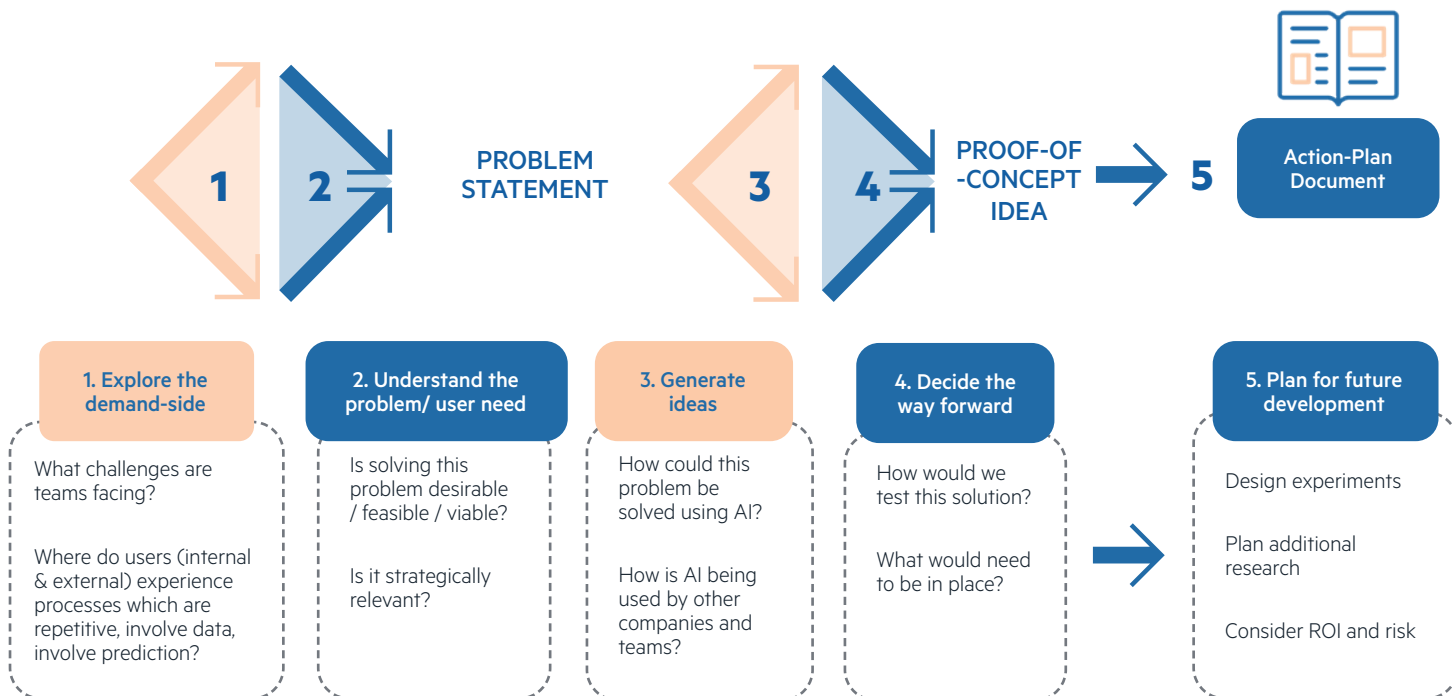
The programme culminated in the full-day, in-person workshop. Over the course of this event, participants worked through FT Strategies' five-part methodology, which was inspired by Google's Design Sprint methodology and is outlined below:

Five stage AI Design Sprint Methodology

1   **Opportunity Identification** - Identify opportunities for generating business value, such as product innovations, workflow optimisation or new ways of using data. The focus at this stage should not be on using AI specifically.

4   **Risk Mitigation** - Assess risks posed by AI, ranging from poor quality of training data to questions around data protection and copyright, and identify steps necessary to mitigate them.

2   **Solution Ideation** - Begin generating ideas for specific AI solutions which could meet those opportunities. Map out where these sit with regard to potential value and feasibility.

5   **Action Planning** - Consider the people, processes and technology needed to implement AI in the organisation.

3   **Solution Design** - Sketch out ways in which AI solutions can be developed. This can be divided in two, looking first at inputs and processes, and secondly at outputs such as metrics to measure success.

The activities on the day took participants from problem identification through to a tangible proof-of-concept and plan

| **1** | **2** | PROBLEM STATEMENT | **3** | **4** | PROOF-OF -CONCEPT IDEA | **5** | Action-Plan Document |

1. Explore the demand-side	**2. Understand the problem/ user need**	**3. Generate ideas**	**4. Decide the way forward**	**5. Plan for future development**
What challenges are teams facing? Where do users (internal & external) experience processes which are repetitive, involve data, involve prediction?	Is solving this problem desirable / feasible / viable? Is it strategically relevant?	How could this problem be solved using AI? How is AI being used by other companies and teams?	How would we test this solution? What would need to be in place?	Design experiments Plan additional research Consider ROI and risk

The aim of the workshop was to help participants:

- Understand the capabilities of AI, explore and prioritise opportunities for news organisations.

- Develop a clear action plan for implementing an AI solution into their organisation, including a technical design and risk mitigation plan.
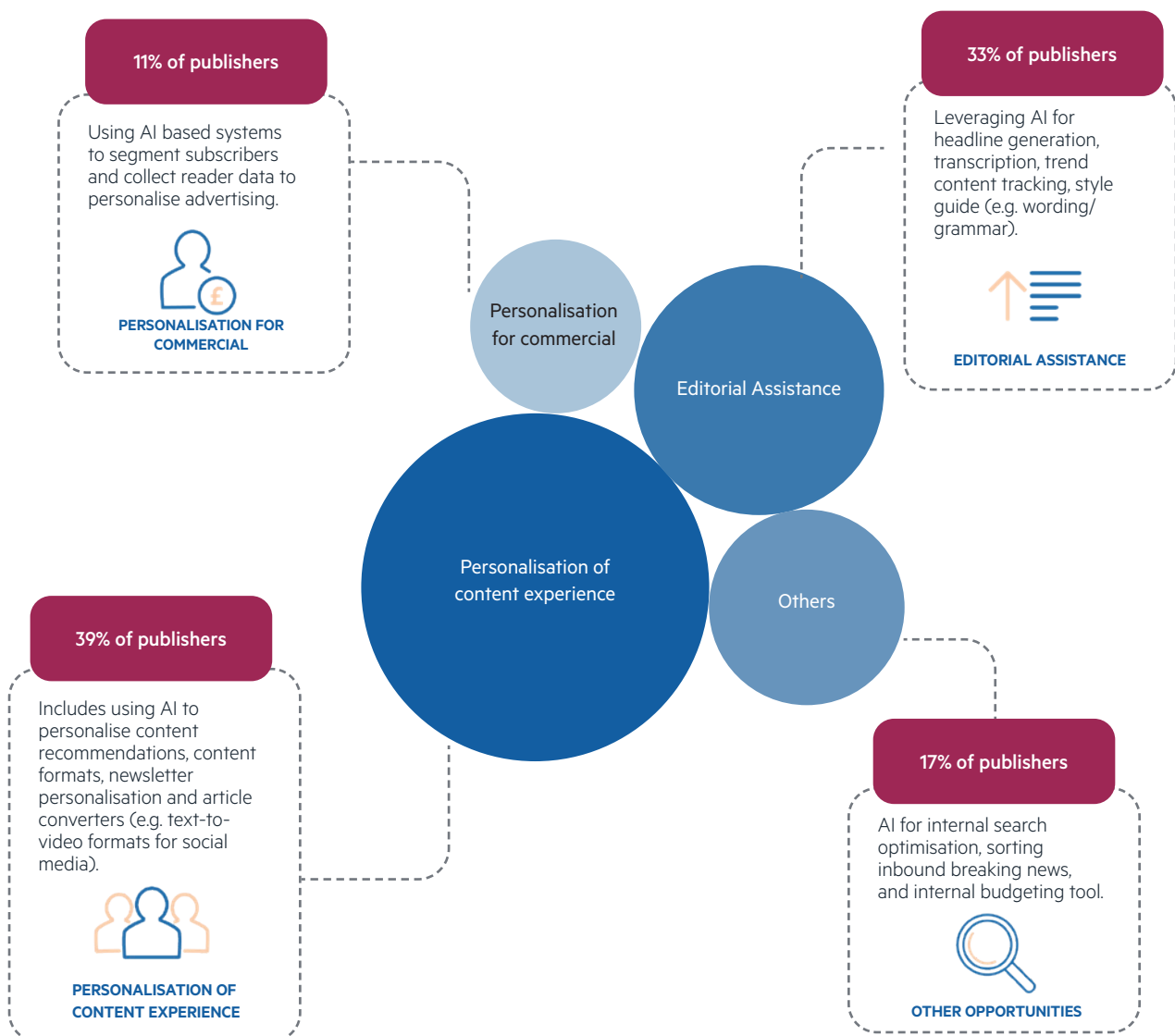
A post-event survey showed the positive effects of collaborative design workshops like the AI Design Sprint. One respondent said that they now saw AI as an "opportunity tsunami" compared to the "garbage tsunami" they were worried about at the start of the day. Others said that they felt more comfortable collaborating internally and adapting the technology.

By bringing together a variety of organisations from across EMEA, the Design Sprint provided an overview of the AI use cases which are currently in focus for publishers. Some of the solutions which were explored as described in the next section. Two common aspirations were:

- To use AI to personalise the content experience for readers.

- To leverage AI to support newsroom work by providing assistance to editorial team members.

We observed clear themes across solutions designed on the day:

11% of publishers

Using AI based systems to segment subscribers and collect reader data to personalise advertising.

PERSONALISATION FOR COMMERCIAL

33% of publishers

Leveraging AI for headline generation, transcription, trend content tracking, style guide (e.g. wording/ grammar).

EDITORIAL ASSISTANCE

Personalisation for commercial

Editorial Assistance

Personalisation of content experience

Others

39% of publishers

Includes using AI to personalise content recommendations, content formats, newsletter personalisation and article converters (e.g. text-to-video formats for social media).

PERSONALISATION OF CONTENT EXPERIENCE

17% of publishers

AI for internal search optimisation, sorting inbound breaking news, and internal budgeting tool.

OTHER OPPORTUNITIES

AI SOLUTION DESIGNS

Each of the publishers at the Design Sprint workshop designed an AI solution to help them take advantage of a business opportunity. The solutions presented in this section have been chosen to highlight the major idea categories outlined in this report, and to illustrate the thought processes behind solution design on the day.

Daily Maverick want to assist editors with relevant user needs recommendations

EDITORIAL ASSISTANCE

Context

Daily Maverick is a South African online and print newspaper, founded in 2009. The business is funded by advertising, events, grants and membership reader contributions through 'Maverick Insider' which, as of August 2023, had over twenty-five thousand members.

Known for their deep-dive investigations, Daily Maverick uses a user needs model in its editorial workflow in order to differentiate its journalism from competitors.

Solution

What was the idea?

The team wanted to leverage their user needs research and use AI to optimise reader engagement. The solution would automate identification of which user needs drive progress towards their reader engagement objectives.

How would it work?

The AI solution would do this by taking articles historically tagged with user needs, training a content classification model, and using that model to inform the editorial team about which user need would suit a story currently in production. This would be done to increase reader engagement metrics like time-on-page and page views.

Why is this valuable?

User needs tagging currently is a manual, time-consuming process, so by automating this Daily Maverick could make newsroom processes more efficient. This would allow the editorial team to focus on the commissioning and writing of the stories, as well as picking angles in stories that would cause more readers to convert or stay as Maverick Insider members.

Additionally, the solution could inform development of editorial products (such as newsletters) by creating additional insights around the most common user need.

DC Thomson want to personalise their readers' experience with a recommendation engine for newsletters and homepage curation

PERSONALISATION OF CONTENT EXPERIENCE

Context

DC Thomson is a diversified UK-based media organisation founded in 1905. They own over 25 media brands including The Press and Journal, The Sunday Post and The Courier. In recent years, DC Thomson have shifted to a digital-first approach, and have invested heavily in data and technology. They currently use several different analytics platforms in order to understand their readers.

Solution

What was the idea?	First, the team identified engagement, content production and content recommendations as priority opportunity areas. They decided to build an AI-driven tagging system that would enable personalised content recommendations suitable for newsletter creation and homepage curation.
How would it work?	The solution would take relevant data points from the various analytics platforms employed by the organisation and use this to train a model that would generate a list of content metadata tags (including sentiment), which could then be automatically applied to each article. These tags could then be used to build lists of content users engage with, allowing the audience engagement team to better target those individuals.
Why is this valuable?	Engagement is central to all subscription metrics. By building an AI solution, DC Thompson can target readers with content that is relevant to them. This means that readers are more likely to engage with content, making them more likely to convert to and remain as paying subscribers.

Czech News Agency (CTK) designed a solution to allow the organisation to sort inbound news leads more quickly

OTHER OPPORTUNITIES

Context

Based in Czechia, CTK is a national public service news agency which is publicly-owned and responsible for providing news content, education and press monitoring for the people of Czechia. A newswire service like CTK has needs different to the other workshop attendees, as they are primarily in the business of discovering news and disseminating this to their clients.

Having the opportunity to concentrate on a single project in today's busy world is a true luxury. When you add top-notch expert guidance to the mix, it becomes even more exceptional. The AI Design Sprint provided all of this and much more. I came back to Prague with a concept we're highly likely to develop in the near future.

ZDENEK VEIT, DEPUTY EDITOR IN CHIEF, CTK

Solution

What was the idea?	CTK receives many emails containing press releases and announcements daily. The team designed an AI solution to sort and categorise in-bound breaking news and event emails and re-distribute them automatically to the relevant team at CTK.
How would it work?	The first step would be training a model from emails that were categorised in their CMS and had been meta tagged manually. A solution would be built that categorised inbound emails based on their content and applied tags and categories to all inbound emails automatically. This could be used to direct inbound emails to the right people without manual input, and build an editorial calendar for use in the newsroom.
Why is this valuable?	Automating this process would reduce the administrative burden of their editorial staff having to categorise inbound emails manually, and free up capacity for higher value tasks. If successful, this automation could be applied to other processes at CTK, as they have many products which rely on their own metadata.

Mediahuis want to assist editors in applying a company style guide across content produced by the group

EDITORIAL ASSISTANCE

Context

Mediahuis is one of Europe's largest media groups, owning over 30 brands in 5 countries, including Ireland, Belgium and the Netherlands. Titles owned by Mediahuis include The Irish Independent, De Standaard and NRC. Mediahuis understands the importance of maintaining a consistent editorial style across their portfolio.

Solution

What was the idea?

Given the diverse range of publications in Mediahuis' portfolio, the team wanted to develop an automated editorial assistant which could be localised for each of the markets and languages Mediahuis produced news in, to assist with grammar and provide a consistent 'style'.

How would it work?

The system would involve applying a large language model (LLM) that has been imbued with Mediahuis' grammatical and stylistic house rules from existing articles in the CMS to generate suggestions for editors as they copy-edit articles.

Why is this valuable?

The solution would allow the Mediahuis team to improve efficiencies in their newsroom, freeing up time for editorial staff to focus on more creative tasks, and inform development of more quality products. This would also allow for uniformity across different titles via a consistent quality-control process.

Proto Thema want to use reader data to personalise assets for commercial benefit

PERSONALISATION FOR COMMERCIAL

Context

Established in 2005, Proto Thema is one of Greece's most widely read Sunday papers and leading digital news sites. The company is innovation-focused and has experimented with chatbots in the past, giving readers the ability to find news that interests them through a quick conversation. Advertising is a key source of revenue.

Solution

What was the idea?

The Proto Thema team designed a solution that prioritised user segmentation for more personalised advertising. They were one of the only publications that designed a purely commercial use case on the day.

How would it work?

They aimed to segment readers, using AI to analyse, cluster and categorise existing customer datasets. In this way, they will create a more targeted and higher value proposition for advertisers, for example targeting readers based on user-consented first-party data to show them advertisements more relevant to them.

Why is this valuable?

For the business, this helps the bottom-line as programmatic advertising yields have been consistently declining over the last few years. For readers, this also makes the advertising experience more relevant and tailored, potentially leading to a better user-experience and higher customer satisfaction.

Styria (Die Presse) aim to personalise content to enhance the experience for their readers

PERSONALISATION OF CONTENT EXPERIENCE

Context

Styria are one of the leading media groups in Austria, Croatia and Slovenia. Founded in 1869, they own over 30 media brands in these countries, including titles such as Die Presse, 24sata and Večernji list.

Solution

What was the idea?

A solution was designed to use natural language processing (NLP) on articles, to transform their formats and engage different user groups based on their preferences.

How would it work?

An AI model would be trained on data from different user segments to identify the style and content desired by different user groups, and generate suggestions to the audience engagement team of how to transform articles based on what each segment found interesting.

Why is this valuable?

The solution would allow Styria to cater to the individual needs of readers, increasing engagement and leading to better retention in the long-term. It would also allow transformation of articles that catered to the interests of a variety of readers, such as bullet-point formats for younger readers, without putting extra strain on the editorial team.

ACTION PLAN

Participants defined the next steps needed in order to build and implement their chosen use case. Across the attendees, there were four areas that were commonly considered important:

1 **Stakeholder alignment and buy-in:** Participants recognised the importance of communicating the idea across their wider organisation and maintaining cross-functional involvement from different teams. To maintain momentum, it will be important to give accountability to the individuals in charge of delivery.

In order to drive real impact, defining where the solution fits with the organisation's wider strategy and how it contributes to business KPIs is important. This will involve defining how success of the AI solution will be measured and demonstrating potential Return-on-Investment (ROI) such as revenues growth or cost savings.

2 **Data management and model development:** Attendees understood that any output from a machine learning model can only be as good as the data used to train it. Ensuring data is available, structured appropriately and relevant will allow AI models to be trained to the required level of quality.

4 **Risk mitigation:** Guarding against the AI-specific risks the use case could pose was an important consideration. Factors such as accuracy and quality, accountability and data privacy will need to be mitigated in order to enable successful implementation.

3 **Capability building:** Participants also planned to address organisational capabilities, such as considering whether they have the capacity to build a solution in-house or whether buying one is more realistic. They also looked at talent and considered whether additional training or hiring would be needed.

CONCLUSION

CONCLUSION

This report has explored the importance for publishers to understand and engage with AI. The technology is constantly evolving, and it is tempting for newsrooms to wait and see before they get involved. Organisations which wait for AI to reach a "finished" state, however, are likely to face an uphill battle to catch up with those who were quicker to get involved.

Publishers interested in engaging with AI should:

- **Experiment** - Treat the use of AI models and tools as an iterative and explorative experience. Experiments might not immediately bear fruit, but they can provide useful insight into the workings of AI systems, and stimulate development of organisational capabilities and knowledge.

- **Collaborate** - Ensure that discussions around AI are not restricted to data scientists or other technical teams, or rigidly separated between executive strategy and hands-on usage. Including all voices within the organisation can magnify the impact of AI, and increases the likelihood of identifying and mitigating risks earlier on.

- **Deliberate** - The idea of Responsible AI - adherence to ethical guidelines - should be built in from the start, emphasising concepts such as transparency and accountability.

Before the Design Sprint	After the Design Sprint
There was a feeling that AI presents the risk of a "garbage tsunami"	There was a reframing of the initial response with attendees referring to it as an "opportunity tsunami"
Publishers were hoping to develop a better framework for new ideas and developing AI products	Attendees felt like they learnt how to develop an idea better, as well as understood the design process to develop AI tools in a repeatable way
Attendees wanted a methodology for identifying opportunities, and developing a clear plan to implement and prioritise them	Attendees felt they had a better understanding of how to apply a framework to design AI solutions and hone in on a single solution to carry forward
How to bring a product design and 'jobs to be done mentality' to AI product development, as well as working with internal teams on products that use AI	Publishers felt like they had a better understanding of the planning and cross functional ways of working, regardless of department divisions, needed to address something as complex as AI
There was a fear that AI overpromised, and there was a risk that AI tools would be developed just for the sake of it, and attendees wanted to better understand the possibilities of it	Attendees felt that that AI offered lots of potential, and that AI solutions may be less intimidating' to implement than initially thought

Overall, although the Design Sprint represents only one step in their respective journeys, news organisations who took part in the day said that the experience offered greater understanding about how to apply AI to their work.

We are hopeful that others can follow in the footsteps of our first AI cohort – creating new products for readers and viewers, and establishing greater innovations and efficiency – to support quality, independent journalism for years to come even in an increasingly challenging environment.

ACKNOWLEDGEMENTS
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