Overcoming metrics anxiety: new guidelines for content data in newsrooms

By Elisabeth Gamperl

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Introduction

"Sometimes I feel more like a stockbroker than a journalist," a Reuters Institute journalist fellow told me during one of our small-group discussions. We were talking about metrics-led journalism and how dashboards are becoming a bigger part of our daily routines as journalists.

All over the world, news organisations have increased their use of analytics. Where once the success of a newspaper edition was measured through sales of the entire issue, journalists can now extract real-time information about the performance of individual articles. Very often, that information is displayed on large screens in the middle of the newsroom.

Comparing journalism to stockbroking sums up the unease many journalists have towards work with metrics, and encapsulates the fears some of us still hold: that numbers will overrule human judgment, that we are betraying our journalistic values, and that the so-called journalistic "gut instinct" is no longer needed.

One could say metrics are a manifestation of digital transformation – a transformation that has made the last few years rather painful, especially for traditional newspapers: revenue has been cut, departments were merged or disbanded, workflows changed, and people were laid off.

Digital means we now work in a high-choice media environment, where no one can take their audience for granted. In Germany, there is a popular saying: "A good story finds its readers". That may not be the case any more. In the overloaded,

ever-evolving information ocean of the internet, we have to swim the extra mile to reach our readers.

As former head of audience at the *The Times* and *Sunday Times*, Nick Petrie, who spoke to me for this paper, said: "You might believe that you can't judge good journalism by numbers, but what good is journalism if nobody reads it?"

In the early 2000s – while digital-first publications like BuzzFeed and Huffington Post built data-informed news systems from the start, driving traffic to their sites through search engine optimisation and shareable content that went viral – traditional newsrooms were still trying to figure out how to access their metrics.[1]

And while numbers are considered rational, the discussion about metrics is often very emotional. Caitlin Petre found in her ethnographic study of the role of metrics in contemporary news that metrics exert a "powerful influence over journalists' emotions and morale". She wrote that metrics evoke a range of strong feelings in journalists, like excitement, anxiety, self-doubt, triumph, and demoralisation. [2]

All of that confusion and emotion with regard to metrics in newsrooms was my motivation for this paper. I interviewed data analysts and newsroom managers from different newsrooms in Europe, South America, and Asia. When selecting my interview subjects, I mainly focused on specialists from print media houses because, in my own experience, they have to manage the difficult balancing act between

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[1] Nielsen, R. and Cherubini, F., 2016. *Editorial analytics: how news media are developing and using audience data and metrics*. Digital News Project. [online] Reuters Institute, p.9. Available at: <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/Editorial%2520analytics%2520-%2520how%2520news%2520media%2520are%2520developing%2520and%2520using%2520audience%2520data%2520and%2520metrics.pdf> [Accessed 2 June 2021].

[2] Petre, C., 2015. *The Traffic Factories: Metrics at Chartbeat, Gawker Media, and The New York Times*. [online] Columbia Journalism Review. Available at: <https://www.cjr.org/tow_center_reports/the_traffic_factories_metrics_at_chartbeat_gawker_media_and_the_new_york_times.php> [Accessed 30 April 2021].

shifting from the traditional print business to building a sustainable digital strategy for content creation and distribution.

One special focus of my paper is on how to communicate and work with data effectively on a daily basis. In my opinion, it is not just about identifying the right metrics, but also managing to weave the work with metrics into our daily routines to create great journalism.
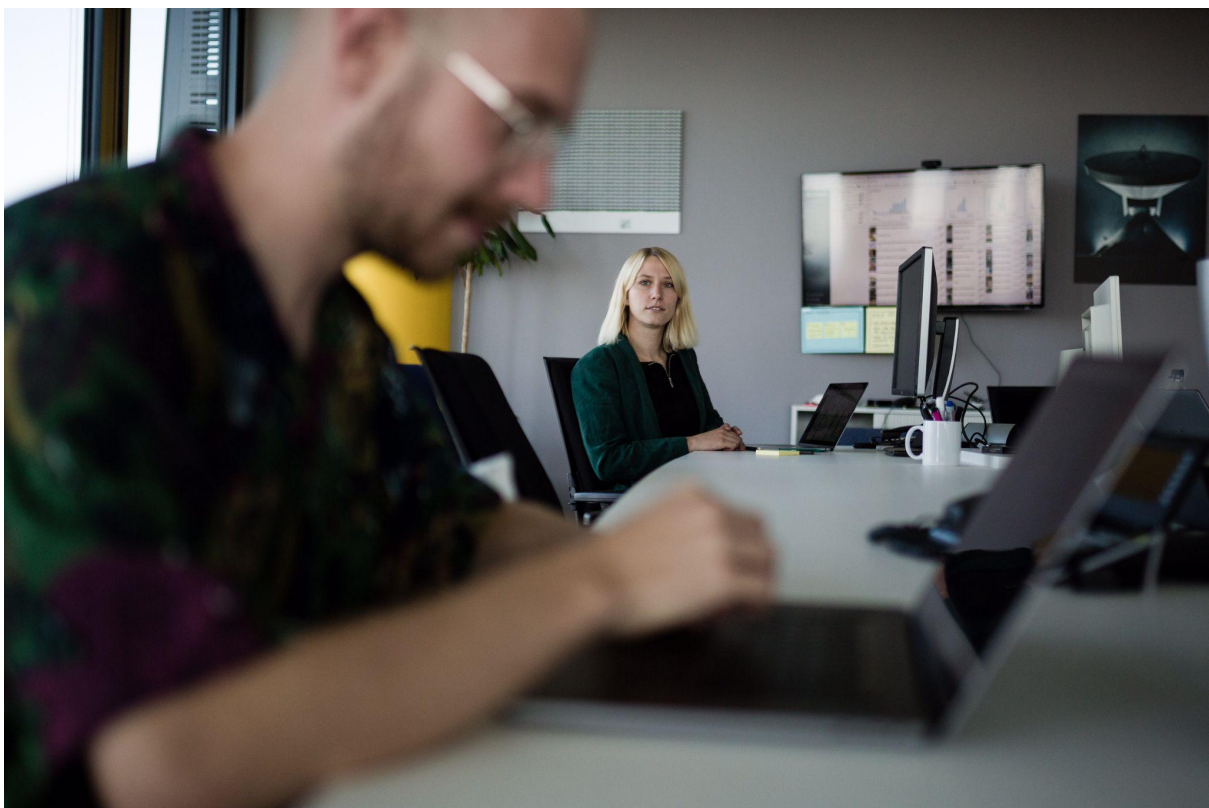
Paper author Elisabeth Gamperl at the Süddeutsche Zeitung office in Munich. Photo: Friedrich Bungert

During my interviews, some steps and learning processes were mentioned repeatedly. In this paper, I aim to bring those lessons together for those who do not have the same audience resources or are just at the start of their metrics journey.

Following on from this, I would also like to draw on the subdivision that Rasmus Nielsen and Federica Cherubini visualised in the Digital News Project of the Reuters Institute from 2016.[3] In their analysis, the authors envisioned working with metrics into three stages of evolution: rudimentary, generic, and editorial analytics, as shown on the graphic below:

Rudimentary Analytics ○ Generic Analytics ○ Editorial Analytics

| Some data, but little organisation and culture, and no systematic link to decision making and few attempts to update to an evolving environment. | Multiple standard tools and organisation and culture in place for short term optimisation. | Tailored tools, organisation, and culture supports both short-term and long-term data-informed decision making in the newsroom and evolve over time. |

According to the authors of the Digital News Project 2016,

these are the stages of analytics used in newsrooms.

Most media organisations are still working with data in the rudimentary or generic stage: they've developed tools for short-term optimisation, like testing headlines or finding good times to publish. Real power lies in the editorial analytics stage, which means using audience data and metrics to make data-informed decisions. The challenge lies in implementing a newsroom culture that supports editorial analytics. I hope this paper makes a contribution to the individual journey of your newsroom in meeting that challenge.

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[3] Nielsen, R. and Cherubini, F., 2016. *Editorial analytics: how news media are developing and using audience data and metrics*. Digital News Project. [online] Reuters Institute, p.16. Available at: <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/Editorial%2520analytics%2520-%2520how%2520news%2520media%2520are%2520developing%2520and%2520using%2520audience%2520data%2520and%2520metrics.pdf>

"Good" journalism in the era of metrics

Traditionally, the criteria newsrooms used to measure success were fairly subjective: Did the story have an impact on decision making or the lives of people? Was the bad person brought to justice? Did the story win an award? The digital media environment, and its accompanying trail of data points, changed the maths and made it infinitely more complex.

A "good story" might be one that received many hits or drove subscriptions. A "good story" might also be one that has a positive influence on society.

If we don't choose our words carefully, this ambiguity could affect the way we gather news. We have to be precise in our rhetoric when providing feedback, or "good journalism" may become conflated exclusively with either good numbers or high impact. What is popular is not always what is important, and confusing the two can contribute to a reluctance among journalists and editors to engage with the data.

Sonali Verma, deputy head of audience at the Globe and Mail, gave me an example of how they are walking this line in Canada. When a senior editor communicates weekly successes, it's not a simple list of the most-clicked stories, "He doesn't say, 'The story was great because the numbers were great'. He says it worked because the reporting was excellent, the headline was strong. In other words, it's not like we're relying on the numbers to decide everything or to tell us everything. There is still a place for human judgment." It takes journalistic insight to look at the data and really understand why an article worked well.

An ethnographic case study among online journalists in the United States in 2013 and 2016 echoed this sentiment.[4] According to the researchers, journalists distinguish between a story "doing well" and "doing good". "Doing well" meant the story performed well based on metrics, "doing good" is set in contrast and suggests that the article may not have reached a large audience, but had an impact on public policy or otherwise served the newspaper's public service mission. This differentiation can be read as an underlying critique of what they described as the "current market information regime": "It rewards and punishes news organisations based on criteria that have little to do with the public service mission of journalism."

There's no black and white solution to this dichotomy. Every interviewee I spoke to said we must always be aware that some articles are essential for the newsroom but won't find a lot of readers. Our new reality requires a balancing act between journalistic instincts and external market and distribution pressures.

Effective use of editorial analytics in your newsroom will always require an interweaving of metrics with human judgement.

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[4] Nelson, J. and Tandoc Jr., E., 2018. Doing "Well" or Doing "Good": What Audience Analytics Reveal About Journalism's Competing Goals. Journalism Studies, 20(13), pp.1960-1976.

Do the groundwork

Chris Moran, head of editorial innovation at the *Guardian*, summarised the purpose of analytics very well when he said: "Metrics are a vehicle for cultural change through which you can make journalists behave differently. I want the whole newsroom to believe that when we press publish, that is not the end of the process. And I also want the newsroom to believe that these numbers can help them improve their journalism."

But before jumping into working with metrics on a daily basis, take into consideration that team structure, workflows and reporting may all need to change in response to the data. Be ready to question yourself and your aims constantly. If you do not expect and embrace change, metrics will become a source of discomfort in your newsroom.

Prepare for change management

Martin Jönsson, editorial development director at Swedish daily *Dagens Nyheter* spoke in our interview about their shift from print newspaper to digital news source with the focus on digital subscriptions. Thanks to metrics, *Dagens Nyheter* had a clear idea of who their digital readers are, Jönsson said. This led to the opening of new newsrooms in Gothenburg and Malmo in the south of Sweden. Back in the print-only days, the agenda was dominated by Stockholm, but the switch to digital readers made it clear their audience was much more widespread and in need of representation.

Managing change in a newsroom is never easy. Jönnson said they had problems in the beginning, but showing the impact of working with metrics in the ever-evolving

landscape of digital journalism helped editorial staff accept metrics as a new tool in the newsroom.

"We don't get any negative reactions any more. We had some in the beginning, but people understood that this has been essential to us for our transformation – in order to make the company more profitable – and that this also allowed us to invest more in the newsroom and in the people."

The leaders have to be on board

All my interview subjects noted that a successful metrics strategy requires the involvement and support of leadership. Sonali Verma from the Globe and Mail said: "Our newsroom leaders believed that change was necessary. That's a huge part of the success. If I were the only person in the newsroom doing this, it would not have worked."

Leadership should not only be in agreement with the strategy, they also need to understand and be able to work with metrics. Petrie explained: "It's vitally important that the senior members of the newsroom get comfortable both using it and talking about using it because it signals to everybody else that it matters."

Without the leadership on board, your metrics process is at risk.

Choose your measurements wisely

You need time, experience and patience to interpret your data properly. A lot of mental gymnastics is required of analysts to handle the "data spaghetti monster".

Click-through-rates, page views, engagement time, dwell time… there are many metrics, but it is not necessary to capture and measure everything. Instead, you should focus on measures that support your editorial and revenue model goals, otherwise you run the risk of changing what journalism in your newsroom is in order to fit the metrics you have, instead of changing the metrics you have to fit what our journalism is.

For instance, if your goal is audience growth, you must start measuring new users. If your objective is to generate more subscriptions, perhaps you should consider measuring conversion journeys in more detail, from anonymous to registered readers.

Media outlets with a digital subscription model pay a lot of attention to engagement metrics: time on site, pages per session and bounce rate: the measures the percentage of readers who visit a single page and look at nothing else on your website before leaving.

"We're trying to create a loyalty to make them return more often than read more, because we know that this keeps churn low," said *Dagens Nyheter's* Jönsson. *The Times'* Petrie said: "We tell the newsroom to focus on engagement. We think the newsroom can affect whether people engage by writing good stories, by making sure those stories are presented with good pictures and videos and graphics, by sharing those stories on social platforms and getting people to come and read."

Once you've clearly defined what you want to achieve, it is essential to ask yourself if the metrics you're tracking are a true reflection of the desired effect towards your overarching goal. For example: Will tracking and targeting increased newsletter

openings really help you convert readers into subscribers?[5] Are push notifications helping to retain users and drive loyalty?

Whatever your chosen metric, the *Guardian*'s Moran warns it should be objectively measurable and reliable over time. There are some metrics that might be too superficial to base decisions on. Esra Dogramaci addressed this topic in 2018 in her role as the Senior Editor at *Deutsche Welle* in a blogpost for the Global Editors Network. She wrote: "Things like views, reach, clicks and impressions may look impressive on aggregate, but are very superficial. They aren't actionable metrics, meaning we can't really use them to feed into editorial or content strategy. Things to pay attention to are dwell time, retention rate and watch time. Look at how your content is consumed and shared."[6]

You should also be wary of working with a sole so-called "God metric" for content, the authors of the Digital News Project 2016 wrote.[7] It may be good for providing an overview, but to be successful, you must study the numbers in depth and in context.

[5] O'Donovan, B. and Kramer, M., 2018. How to build a metrics-savvy newsroom. [online] Available at: <https://www.americanpressinstitute.org/publications/how-to-build-a-metrics-savvy-newsroom/> [Accessed 8 July 2021].

[6] Medium. 2018. Metrics that matter: Tips on how to get the best out of your newsroom analytics. [online] Available at: <https://medium.com/global-editors-network/the-metrics-that-matter-27419d7c860c> [Accessed 2 September 2021].

[7] Nielsen, R. and Cherubini, F., 2016. Editorial analytics: how news media are developing and using audience data and metrics. Digital News Project. [online] Reuters Institute, p.9. Available at: <https://reutersinstitute.politics.ox.ac.uk/sites/default/files/research/files/Editorial%2520analytics%2520-%2520how%2520news%2520media%2520are%2520developing%2520and%2520using%2520audience%2520data%2520and%2520metrics.pdf> [Accessed 2 June 2021].

Understand data in context

Figures should always be considered in relation to other metrics. The director of Data and News at *The Times*, Dan Gilbert, described why context is important in a very interesting blogpost on Medium.com. If an article only had more readers because it was given a slot at the top of the page, he said, nobody is learning anything useful from that. "And at worst it creates a self fulfilling feedback loop," he warned.[8] This means journalists and editors become happy about well performing articles but have no interest in why the numbers are great. It's as if one is saying: "Just tell me which article got me the most readers; I don't care why."

The Times is very aware of the problem of articles being a victim of its circumstances, Petrie told me. To solve this problem, they developed a score that compares articles only with equivalent articles promoted in the same spot. Their analytics tool, called INCA, displays a set of indices that can be used to help evaluate how well an article is performing for a given metric relative to how well *The Times* expected it to perform in that context – like the position on the website or the length of the article. An article is scored on a scale from 1 to 5, where 3 is expected, 4 or 5 is better than expected and 1 or 2 is worse than expected.

Not every media outlet has the capacity to implement such an index, but being aware of how much each article depends on the fate of its distribution helps to frame figures in a healthier way. It also helps to discourage that all-too-familiar dynamic of editors pressuring homepage managers to put their pieces in the top

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[8] Gilbert, D., 2020. Adventures with metrics in The Times and The Sunday Times newsrooms — Part 1: Problems. [Blog] Medium.com, Available at:
<https://medium.com/news-uk-technology/adventures-with-metrics-in-a-newsroom-part-1-problems-81ff8ace132> [Accessed 15 June 2021].

slots to achieve a higher ranking. This behaviour is an example of Goodhart's Law: "When a measure becomes a target, it ceases to be a good measure."[9]

In my opinion, the homepage should be staffed and independent enough to prevent such dynamics from occurring. Otherwise nobody is learning from the data. Instead of a self-fulfilling feedback loop, the goal is to implement a learning-focused feedback loop where everyone is data informed and adapts the learnings into their routines.

Be careful how you inject data into the newsroom

Journalists are not analysts. Most of them became journalists because they care about words and stories. That doesn't necessarily mean journalists hate metrics, but they don't have to be super excited about them either. It is important to provide the newsroom with data it really gets value from. Measure a lot, but report less. And make a clear distinction between research and reporting to reduce the risk of data overload.

There is a balancing act between keeping a newsroom informed and not overwhelming them. Jörn Rose, Head of International Audience at Huffington Post said: "I think if you provide too much, it [...] has a counterintuitive effect of making people less engaged with it because people don't know where to focus. It becomes a little bit overwhelming and disengaging to just see reams and reams of data."

Every interviewee told me it is important to be transparent about metrics but you also have to understand the preferences and needs of editors and journalists. For

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[9] Strathern M. 'Improving ratings': audit in the British University system. Eur Rev. 1997; 5 (3): 305–321.

some it will be enough to receive reports and emails from time to time, others need access to real-time dashboards, still others just want to know the performance of their own articles.

This is where having a user-friendly and easily accessible dashboard comes to the fore. But don't expect your journalists to "DIY" with the dashboard and be done.

The *Guardian*'s Moran told me his team developed a list of questions they work through before submitting data to the newsroom. These include: "Who is the audience of the data and who will act on it?", "What is the mechanism for delivery?" or the very important question: "What is the potential damage and how can it be gamed?".

Petrie told me they used to have revenue data in their INCA tool that showed how many people had subscribed through an article, but they have taken out this information. He said it was unfair to have journalists measure themselves against a metric they couldn't control. A conversion might be affected by text marketing, such as a promotional offer, or a sale in the online store that day.

All my interviewees communicated their figures broadly in editorial meetings and in more details through mailings to different groups of recipients. Moran mentioned, for instance, a daily email at the *Guardian* which communicates how articles drove reader revenue the day before. That mail does not go to the whole newsroom. Instead, "they are sent to people like our membership editor and senior staff who aren't going to find it depressing if they don't see their name on it and have a relevant connection to the data and the ability to act on it".

Real caution is required when it comes to rankings such as a top 20 list of the best articles. "We don't want journalists to worry about what they write about," said Petrie, after telling me *The Times* does not release rankings. "You want them to be engaged with the data and you do want them to care, but you don't want them to feel judged."

Rather than displaying a screen with dashboards or rankings, Petrie said they want to promote information on screens that is helpful to the newsroom. For example, "Did you know that most people read us between 6 a.m. and 8 a.m.?"

Huffington Post's Rose said they are also sensitive about sharing publishing volumes around individual authors, because data can be misinterpreted as a criticism on productivity.

How to use metrics to take action

For many journalists, metrics are experienced as a final figure that they can't do anything about: 'A story had X-number of page views, a post had this many comments or a feature led to that many new conversions. So now what?'

It's essential for journalists and editors to begin to see metrics as not something static and immovable, but an ongoing process to work with – a positive feedback loop.

The question should not be: What is the number?

But rather: What can you do in response to this number?

Use metrics to make a range of decisions: what stories to commission, how many articles to publish, which headlines to change, which articles to reposition on the page, and so on.

For newsrooms wanting an active, forward-looking relationship with data, I propose six guidelines that will yield both short-term benefits and improve longer-term strategy decision-making.

Work with a hypothesis

Metrics won't tell your newsroom what it should write or which format works best. What they will do is provide a sounding board for your hypothesis.

Globe and Mail's Verma said that instead of listening solely to your gut, "metrics give you the chance to examine what you believe to be true". As Petrie put it: "We set goals for what we want to achieve. Doing it, and *then* measuring whether we

achieved it or not. Because measuring for the sake of measuring is almost useless."

You start by looking at what stories or topics your readers consume, at what time, and via what channel. Armed with this knowledge, you can start testing hypotheses and making decisions based on this data.

Verma gave me an example about working with hypotheses from her newsroom. Traffic to all articles from the investments section was measured to see which commissions could be binned. While doing this, Verma saw a pattern emerge: "It looks like most readers who come to the *Globe and Mail* do not really care about what the Asian stock markets did. So every day we had been posting an Asian stock market report. I realised that day after day, week after week, month after month, quarter after quarter, this piece did nothing for us. It didn't help retain existing subscribers," she said.

Verma and her team decided to merge this piece with the daily premarket report at 8.30am in the morning, just one hour before their local stock market opened. In this report they inserted a bullet point on Asian stock markets, saying where Japan's Nikkei or Hong Kong's Hang Seng Index had closed.

"We tried it, and it worked. It is important to try something different to test a hypothesis. In this case, one bullet point does the trick. I don't need a full article about the Asian stock markets, and we noticed that this paid off."

Setting goals for your stories or sections also prevents the "cherry-picking problem". What I mean by that is in retrospect it is easy to say that this or that story went well. You simply pick a metric that confirms the success of the story. If you set goals or release a set of theories, it is harder to bend the data afterwards.

Metrics mean better planning

At its core, metrics allow you to approach the news-gathering process in a more structured way. All my interviewees confirmed that working with metrics led to a change of the editorial planning processes.

Dagens Nyheter's Jönsson said: "I think it's all connected: when we plan our journalism better, we look at how it should be optimized, how it should be packaged on platforms, how it should it be distributed, and when should we publish it."

Jönnson said their workflow is driven by the aim of supporting better-planned journalism. The key is not the metrics in and of itself, but in the planning it empowers. "We focus so much more on our original journalism, because that drives the digital subscription business of *Dagens Nyheter,*" he said.

Mathias Høibakk Bergquist, content developer and data specialist at Norwegian outlet Amedia AS, provided me with an insight into how his newsroom uses metrics in the planning process for an upcoming election. His department does an analysis of all the stories written during the last election to see, for instance, if there were certain stories or explainers that worked better than others.

"We analysed what kind of political stories we need to recommend to the newsroom in preparation for the election. We took a load of data, categorised it and looked for trends." A recent analysis showed for example that the readers of Amedia prefered stories about the consequences of political positions through the lens of ordinary citizens. Those kinds of stories were more popular than just a politician announcing a new policy, he found. So a story about how a percentage point increase in income

tax will impact someone's ability to pay their mortgage is more popular than the straight news of the policy.

Better planning also means newsrooms know when to assign more resources to stories that need them. Anna Åberg, managing editor of *Dagens Nyheter*, said there can be as many as 50 people involved in special projects now – some just for a few hours and some for weeks or even months.

Dagens Nyheter also assigns dedicated data analysts to bigger projects, like elections or the Olympic Games. At the outset, these analysts are tasked with providing an audience profile for that subject: who and how content is being consumed and, for instance, how to optimize SEO for them. "We also set goals for the projects, both journalistic goals and traffic goals," Åberg explained.

One of the biggest learnings about data from her newsroom, she said: "You need good planning and you have to think about the presentation and the visual parts of your content from the very beginning."

It's a daily experimentation job

Analytics-informed decision-making will involve the day-to-day tweaking of headlines, pictures, placement, and promotion across social media.

If, for example, you have a story you had high expectations for that did not perform, you should repackage and republish in another context and see how it works. "If a story should work and it doesn't, we try to look at the presentation, change the headline, change the picture and publish it again at another time," said *Dagens Nyether*'s Jönsson.

Petrie told me *The Times* looks for different patterns, like when articles have a high reader score but a low dwell time score: "What that says to us is the headline or the picture is really like, 'Hey, come read me'. But when people come through, they don't stick with it. That might be a one fact story: there's not that much more to it once you've read the first paragraph, or it might be that the headline missold the article."

When the reader numbers are low, but the engagement is really high, it tells an opposite story. "That says like when people find this, they read it, but they're not finding it," Petrie explained. "So maybe it needs to go in a newsletter or it needs to go on social media or it needs to come higher up the homepage."

For all of these decisions and actions, a user-friendly dashboard is essential to being able to learn from daily metrics routines about which articles work best and why, and why some pieces didn't work out the way you expected.

Normalise talking about failures

As a general rule in newsrooms, every story has involved an investment of time and resource and care. Journalists are told from day one to never make mistakes – a factual mistake in an article can have devastating consequences. This makes newsrooms a challenging environment in which to discuss things that didn't work out as planned. Every journalist carries a tension about failures.

In contrast, working with metrics is all about trial and error, adjustment and retrial. Every failure is a step closer to success.

For these opposing outlooks to align, newsrooms need to adjust to a culture where it doesn't matter if something doesn't work the way you thought it would. Failure is not personal.

"We have as many open conversations about when things haven't worked as possible without everyone getting really upset," said the *Guardian*'s Moran. "That is not easy because people work incredibly hard in the newsroom."

Petrie described a similar outlook at *The Times*. Nobody should feel judged or punished, he said. "Commissioning a story and learning that readers didn't really like it is not that bad a mistake. Readers just aren't into this story or we were not covering it in a way that they find interesting."

Success is not solely measured in having more traffic or subscriptions. It can also be in something that helps you understand your audience better, for example. It is valuable in itself to have people experiment and expand their thinking by learning from failures.

The more important question related to metrics in newsrooms is: what measures are to be taken in response to failures? Defining best practice is crucial.

Jönsson suggests not focusing too much on unsuccessful stories but rather what lessons they convey about best practices. "I think it is best to find a lot of best practices and tell the newsroom that this is a very good example of how we should work," said the *Dagens Nyether* development director. "And if you do that often enough, you will get a change of culture. You will get people to move in that direction by working in that way."

It may go without saying, but when things are working out – a feature being very successful or your audience reacting positively – make a big deal out of it. Celebrate the wins.

Identify the unnecessary

For a long time, the narrative around online publishing was to publish as much and as often as possible. This makes sense in a world where page views are monetized. But now, as many newsrooms shift towards subscriptions, the conversation about quantity is changing.

It was a viewpoint repeated by many of my interviewees: a number of them had lowered their daily article counts. And the numbers back that decision, as a post about content reduction on Digiday attested: many publishers confirmed that publishing less led to a growth in audience traffic, higher dwell times and more subscriptions.[10] It makes sense that journalists with more time can produce more in-depth stories, with fresher angles, and more exclusives.

Moran managed the *Guardian*'s content reduction project a couple of years ago. Their basis for content reduction was data that showed a real digital limitation: "a finite amount of space for meaningful promotion", as Moran called it. "We were producing too many things that fell below the bar of being promoted," said Moran. Before this analysis, the newsroom was publishing quite a lot of content because they could rather than should.

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[10] Southern, L., 2020. Publishers are growing audiences by producing less content - Digiday. [online] Digiday. Available at:

<https://digiday.com/media/publishers-growing-audiences-producing-less-content/> [Accessed 3 July 2021].

The approach the project team took was to look into page view data to find out which content was consistently failing. The next step was to set a quota at each desk based on these figures. "So we basically said you are publishing 100 articles a week at the moment and 30 of them don't get read at all. So from now on, we would like you to try to publish 70 a week. And if it's a big news week, you can stretch that target, but aim for 70," Moran said. He didn't use the data to tell the editors what to publish, only how much room they had to publish.

At *Dagens Nyheter* they analysed stories in the lowest 25% of traffic to see what they had in common and find patterns. Jöhnson was quick to emphasise that this doesn't mean newsrooms should only concentrate on the top performing stories, but if the stories are not working at all, change is essential. "In some cases, we have stopped doing these stories and no one is complaining because no one was reading them anyway," he said. "And in other cases, we have done better packaging and managed to increase the readership."

A reduction in content can have positive implications for the workload of journalists, and it encourages processes of self reflection and standard setting that all good editors promote. In the best case, the process also has the advantage of providing more clarity to readers too.

This type of evaluation should not be seen as an every-five-year-project but as a continuing process.

Promote trust in your analysts

Many newsrooms now have a data person or a team dedicated to analysing and growing their audience. As I said before, not every journalist is a data analyst and it is advisable to employ specialists and involve them in the editorial decision-making process. Journalists should see their analysts as consultants they can call on before, during, and after the creation process.

The vast majority of my interview partners hired audience teams with some journalistic background. "You need people who can [come from] a position of understanding how and why a given article was commissioned and written in the first place," said Moran.

Norway's Bergquist said his team were all journalists at heart. "So what we want is just to make sure that all our newspapers do as much of the great journalism as possible. Using data is part of showing them how to get there."

We often hear about trust in the context of audiences trusting journalism, but it is equally important within newsrooms. Journalists should be able to trust the data informing the decision-making process and feel that metrics are being used humanely and in their best interests. This may require both relationship building and training.

In the newsrooms of my interviewees, analysts were given the responsibility of training editorial departments. Jörn Rose said: "We do a lot of training, both when people are onboarded, but also refresher training sessions to make sure that people know what they're looking at and metrics are explained." One-on-one conversations

are also often an effective way to introduce metrics.

Building a relationship of trust may rely on showing editorial departments the benefits of the insights they can provide. In Norway, Bergquist's team plays a role in helping editors create business cases for better staffing, or staff reassignments. "For instance: If we find the breaking news desk needs more punch, the natural solution is to reassign an extra journalist to the breaking desk. Or if your newsroom identifies that economy and business is of special relevance for you readers, you might expand the department writing these kinds of stories. It's not always so much about hiring extra people, but getting the most out of the organisation we already have," Berquist said.

Journalists should feel free to discuss issues with analytics, too. At the *Globe and Mail*, Verma told me that analysts can help journalists do fewer stories they don't want to do. "I help reporters by showing them their stories with the lowest scores. I can tell you 90% of the time when I did that, the reporter looked at the list and said, 'I knew that wasn't a story; I had to do it.' I always answer: 'Now, the next time someone asks you to do it, you show [them] this list and you say, look, when I write about that, it doesn't do anything. Nobody reads or shares it. Nobody subscribes because of it.'"

Ultimately, analysts should be seen as vital members of the newsroom. Team spirit and an open door policy is key to fighting metrics anxiety.

Conclusion

In responsible hands, metrics can be a powerful force for enhancing the efficiency, sustainability, and quality of media outlets as long as there is a focus on the right measurements, backed up by a good communication plan for the newsroom, commitment from the top management, trustworthy analysts and user-friendly and accessible tools.

Metrics are not there for rating journalism. Numbers say absolutely nothing about the quality of an article, but they do offer media organisations unprecedented insights into audience habits, provide a sounding board that empowers journalists to take action on a daily basis, and give longer term strategy guidance to editors and the editor in chief.

As I said at the outset, it is crucial to select the right data points for each decision. If you don't, you run the risk of changing what journalism is in order to fit the metrics you have, instead of changing the metrics you have to fit your newsroom's definition of effective journalism. The journalistic values of your organisation should remain the driving force behind its reporting.

Working with metrics is not straightforward. A lot of patience and mental fortitude is required to navigate through the data jungle. You have to learn how and when to use them and when to trust your instincts. "Metrics tell us things we absolutely don't, or can't, know from our gut", Moran said. Metrics won't tell your newsroom what you should write or which format works best, but they will provide a proving ground for your hypothesis.

Keep in mind that most metrics are only approximations. Dwell time is an approximation that "the readers liked this", for example. What if they spent such a long time reading a piece to the end because, for instance, they found the argument upsetting? Data cannot perfectly communicate how humans think and feel.

For all of these reasons and more, it is worth ensuring your editors are confident about what data is and how it works. It is worth training editorial departments, too – not just once in a while, but on a regular basis. Your newsroom should not have the feeling that you are not in control of the numbers, or they will always remain something to be afraid of, something that will dictate what you have to do.

Metrics are not black magic, and they're not going to disappear either. They're here to stay. The key to ridding your newsroom of metrics anxiety is to help your teams get serious about it – especially the management team, who should exemplify bold, data-informed work.

Great journalism remains the most valuable thing our newsrooms have to offer, and the data shows that our audiences still respond to good stories.

When you're ready to embrace metrics in your newsroom, you can start by formulating some questions about the work you do, and then considering if the numbers provide any clues to the answers. When thought about in this light, metrics are really just a new path to our old journalistic roots.