



OUR ORGANIZATION

The European Broadcasting Union (EBU) is the world's foremost alliance of public service media (PSM). Our mission is to make PSM indispensable. We have 73 Members in 56 countries in Europe, and an additional 34 Associates in Asia, Africa and the Americas.

Our Members run over 1,800 television and radio channels together with numerous online platforms. Together, they reach audiences of more than one billion people around the world, broadcasting in more than 120 languages.

We are one EBU with two distinct fields of activity: Member Services and Business Services. Our Member Services strive to secure a sustainable future for public service media, provide our Members with a centre for learning and sharing, and build on our founding ethos of solidarity and cooperation to provide an exchange of world-class news, sports news, and music.

Our Business Services - operating under the Eurovision brand - are the media industry's premier distributor and producer of high-quality live news, sport and entertainment with over 70,000 transmissions and 100,000 hours of news and sport every year. We return the profits of Business Services to the organization for the benefit of Members

We have offices in Brussels, Rome, Dubai, Moscow, New York, Washington DC, Singapore and Beijing Our headquarters are in Geneva.



MAKING BEST USE OF BIG DATA IS
A STRATEGIC QUESTION FOR PSM
IN THE DIGITAL ENVIRONMENT.
WE SHOULD DEVELOP A
TRANSVERSAL APPROACH AND
A MINDSET DRIVEN BY A CULTURE
OF CHANGE WHICH INTEGRATES
THIS NEW DIMENSION INTO OUR
DAILY WORK.

Guillaume Klossa

Director of Public Affairs & Communications, EBU

EBU BIG DATA INITIATIVE

The EBU Big Data Initiative (BDI) was launched in July 2015 in answer to the increasing relevance of big data strategies for Public Service Media (PSM) and the need for them to leverage big data's potential, to remain competitive while staying true to their values. To tackle the different facets of big data with a horizontal and comprehensive approach, the EBU BDI is structured as a cross-sectoral project that brings together Members and crucial EBU departments: Public Affairs & Communications (PAC), Technology & Innovation (T&I), Legal, Media, and the Media Intelligence Service (MIS).

THE INITIATIVE'S MAIN OBJECTIVES ARE:

- Raising Members' interest in and insights on big data's potential for their organization
- Fostering networking and the exchange of ideas and best practices among PSM
- Developing a community spirit by gathering people with different expertise
- Providing recommendations and guidance based on the results of the various events

THE EBU BIG DATA INITIATIVE COVERS FOUR AREAS WITH THE FOLLOWING FOUR PARALLEL BUT INTERTWINED WORKFLOWS:

These workflows aim to address the various issues related to the appropriate use of big data by PSM. The purpose is to foster exchange of skills, know-how and experience in all those areas, and to guide PSM in the implementation of data-driven strategies which allow them to keep up with the increasing personalization of services while staying true to the public service remits and values, in a way that differentiates PSM from commercial broadcasters.

BIG DATA AND AUDIENCE MEASUREMENT

Find ways to better understand audiences by redefining audience measurement techniques that combine quantitative and qualitative research and take account of new media consumption

BIG DATA AND DATA TRUST PRINCIPLES

Inform Members about the legal framework of data protection and privacy, give concrete recommendations on how to implement it, and develop common EBU Trusted Principles

BIG DATA AND MEDIA CONTENT STRATEGY

Use of big data to shape media content strategy and produce data-driven content tailored to audience behaviour and preferences

BIG DATA AND RECOMMENDATION SYSTEMS

Answer the need to develop recommendation systems for customized online offers in line with PSM values of universality, excellence and relevance

This corporate initiative is headed by Guillaume Klossa, director of Public Affairs & Communication. Moreover, to manage and coordinate the project's four workflows, the EBU set up an ad-hoc steering committee meeting, whose remit includes coordinating the BDI departmental workflows; identifying strategic aspects and strengthening synergies; preparing the Big Data conference and the subsequent themed workshops; and reporting on the main findings and making recommendations for possible future action.

BIG DATA

EBU BIG DATA WEEK MARCH 2016

TO LAUNCH THE PROJECT AND CREATE A DYNAMIC COMMUNITY, THE FIRST EBU BIG DATA WEEK WAS HELD IN GENEVA FROM 21 TO 24 MARCH 2016, COMPRISING THREE MAIN EVENTS:

1

EUROVISION ACADEMY MASTER CLASS

For researchers and news professionals on the use of data to better understand audiences and adapt news strategies accordingly.

2

BIG DATA: A GAME CHANGER FOR PSM CONFERENCE

Panels brought together experts from the media sector who have successfully adopted big data in their organizations. On the second day, we tested ideas and thoughts for the future in specialized workshops.

3

BIG DATA HACKATHON

Organized in collaboration with Radio Télévision Suisse (RTS), in which data experts worked through the night to build prototypes and explore new ways to gather and analyse information about Europe's migration crisis.



EUROVISION ACADEMY MASTER CLASS

On Monday 21 March, Maike Olij and Paul Hek, both audience research specialists at NOS, facilitated the first of a new Eurovision Academy Master Class on Data Analytics need Audience Research. Participants were from various backgrounds, from media researchers, a metadata specialist, a concept developer, to an interaction designer. All were eager to understand how to combine qualitative and quantitative research to offer audiences distinctive news appropriate to the public service values of their media organization.

Both trainers insisted first on the limitations and complexity of data:

- What are you measuring exactly?
- Is the data representative?
- Do we really obtain the insight we need?

For data to be used appropriately, it is crucial to focus on individual users and their specific needs in the course of the day. In turn, the needs of audiences have to be put into perspective with the goals of your news organization. As shown by Klara Vatn from NRK and Naja Nielsen from DR, it is crucial for a news organization to (re)define its objectives, which in the case of PSM should reflect their remit.

This led to brainstorming about how the ideal data research team should be connected to the newsroom and the journalists. Participants acknowledged the need for multidisciplinary teams – possibly combining technology and data experts with sociologists – and a procedure for measuring the impact of research.

During the final hours of the Master Class, participants applied the new concepts to a practical exercise: based on fictitious news formats, they had to develop the perfect formula for measuring success. This was a difficult task that highlighted the need to focus on specific news formats, combine qualitative with quantitative methods, and have research tightly intertwined with the daily work of the newsroom.

Increasingly, journalists should also become their own researcher, or at least have a good understanding of their newsroom's objectives, formats and audience needs when they produce stories



CONFERENCE: BIG DATA, A GAME CHANGER FOR PSM

The first EBU conference on big data was held at EBU headquarters in Geneva on 22 & 23 March. It was an inspiring and highly successful event, with 16 speakers and 143 participants from 16 different countries. As the satisfaction survey showed, the event received overall positive feedback from the participants who felt it fostered fruitful exchanges of ideas and inspiring debates on crucial topics ranging from audience measurements and personalized recommendation systems, to the economic value of data and data privacy issues.

As EBU President Jean-Paul Philippot said in his opening speech, "integrating big data into PSM's strategies and changing internal cultures are crucial to 'revisiting our DNA' and adapting the public remit to the digital world." The challenge is to create a trusted relationship with audiences, while developing more personalized media offers and enhancing the viewer experience. The EBU can and should play a key role by offering a centre of expertise and excellence for big data that could help its Members leverage the potential of big data.

The first day featured a series of presentations and panel discussions on the use of big data within the media industry, starting with a good practice example from the Financial Times. In his keynote speech, Financial Times Head of Analytics Robin Goad looked back on how big data has become

a centrepiece of his company's overall strategy and how it helps the group compensate for a declining print readership. Data is powering how we attract new subscribers, but we should aim at implementing a data-driven strategy focused on data quality rather than quantity. Rigorous and constant testing, a chief data officer in a strategic position at corporate level, and considering data collection and analytics as a core investment were all part of the Financial Times' recipe to transform itself into a digital media organization capable of offering readers personalized services.

Following the keynote speech, the first day's panels brought together representatives from EBU Members, alongside media professionals and experts from the press, independent production, and telecom sectors. Discussions covered new audience measurement techniques, developing new programmes from data, trust and privacy, generating value, and personalized recommendation systems. On the second day, delegates shared views and ideas in themed workshops focusing on trust, recommendation systems, data journalism, and developing the right management and skills in house. These interactive workshops gave participants the opportunity to report on their organizations' use of big data and learn from others' experiences.

Speakers and moderators of the EBU Conference with the members of the EBU BDI steering committee



1. WHO IS MY AUDIENCE? MEASURING TRENDS AND GAINING INSIGHT

As Jean-Luc Jaquier, director of Operations at the EPFL Media Lab stated, "we are in the infancy of big data analytics and it is a great opportunity for PSM to better understand audience and improve content itself." Indeed, one of the main objectives for media organizations collecting and analysing data is to better understand their audiences. The Who is my audience? session explored how big data can help future-proof audience measurement and deepen insights into audience behaviour within an increasingly fragmented media environment.

Established audience measurement systems need to be adapted to take account of digital media consumption. Bas de Vos, director of the Dutch television audience measurement committee SKO, explained how the traditional 'TV ratings factory' had been extended to include viewing across all platforms. With online ratings being published daily since January 2016, SKO is among the pioneers applying a hybrid method, combining census data and panel data.

The next step will be to fully integrate online viewing and TV-set viewing data. Sometimes however, data collected in-house might be insufficient, so external or third party data may help improve the accuracy of audience measurements.

Third-party data are often understood as purchased data, but may also be free (open data). Pierre-Nicolas Schwab, CRM Manager at RTBF, showed inspiring examples of how third-party data are used in other industries. In order to emphasize the importance of using a variety sources, Pierre-Nicolas shared a model mapping various data sources based on characteristics such as relevance, intrusiveness of collection, and cost.

Finally, Jean-Luc Jaquier explained how social media data should be used to measure web emotions and opinions, sharing his insights on the EPFL Media Lab's COP21 Horizon project, an interactive platform used to monitor debates on climate change and measure users' emotional engagement. The EPFL Social Media Lab's work relies on academic research to unlock rich audience insights from social media. Whereas most sentiment-analysis tools assess the tone of social media comments (positive, negative, and neutral), the EPFL's approach is to measure emotions (e.g. joy, fear, concern, surprise).

2. RICHER, SMARTER CONTENT: DATA REINVENTING THE CONSUMER EXPERIENCE

Big data is increasingly used also to enrich content and storytelling. Coupled with media's own values and editorial policies, it can also help them adapt their programming and commissioning choices. The question is how can PSM use big data to create richer and more customized media services? To tackle this issue the third session was dedicated to two case studies: *Generation What?* and *VotingAid*.

Margaux Missika, Executive Producer at Upian, announced the launch of the Generation What? – Europe project, which is the international version of the successful French format Génération Quoi? developed by the independent production companies Yami2 and Upian on behalf of France Télévisions. The purpose of the project is to gather data on young Europeans aged 18-34 to increase understanding of their behaviours, aspirations and values. It is an entertaining way to engage young audiences with European PSM that shows how dialogue, interaction and data-driven projects can help PSM gain insight into their viewers' habits and preferences.

Talking about engagement, Minna Rantama, ZEF's Director of Electoral Services, and Jon Pablo Laiseca Blanco, Chief Digital Editor of Cadena SER, shared their experience of how to engage with voters and make use of election data via their project VotingAid, an interactive opinion-matcher that allows voters to closely connect with candidates.

This tool aims to create a closer bond between politics and citizens, inducing them to contribute more actively to the political scene in their countries. VotingAid should empower voters and engage huge audiences with politics and elections, while collecting big data and building large databases with great potential for data journalism.

As of today, the tool has been successfully tested in Finland and Spain with the cooperation of the respective PSM.

3. TRUST ME, I KNOW YOU: USING DATA RESPONSIBLY AND SECURELY

As pointed out by Professor of Law at KU Leuven Peggy Valcke, the title *Trust me, I know you*, is somewhat schizophrenic, summing up the complexity and challenges raised by the use of audience data. Christiane Miethge, Deputy Head of Multimedia Storytelling at BR, explained what she thinks should be the three guiding principles for PSM: always be transparent; always maintain a close communication/dialogue with the user; always give users something back.

Patrick van Eecke, partner at DLA Piper, then provided legal insights. He stressed the importance of adopting an interdisciplinary approach towards big data so that everyone within an organization understands each other's challenges and projects. And legal challenges can be turned into opportunities: data is information; data is power; data is global; data is critical; data is value. The most debated hot spots in the legal sector include: personal data protection and e-privacy; competition; cloud computing; cybersecurity; data ownership and ethics.

Marketing Director TV & Digital at RTÉ Lucy Campbell, spoke on a more practical level of RTÉ's approach and experience regarding the use of data. Most important is to avoid data misuse and communicate with the audience to ensure the company doesn't lose its trust. Individuals who are providing their data must get something in return.

The panel discussion touched on cookies, now requiring affirmative action (consent) from the user, the impact of the new Privacy Shield replacing the Safe Harbour Agreement for transatlantic data transfers and the opportunity for PSM to develop, as part of their remit, campaigns to inform and educate users about their data privacy.



4. RISING REVENUES: WHERE IS THE VALUE? WHAT ARE THE PITFALLS?

In his presentation, Big Data Vice-President of Orange Ludovic Levy emphasized that a clear and future-proof data protection policy does not simply improve relations with customers, but contributes to innovating our future services. In a nutshell, data protection can be seen as a business opportunity and PSM organizations should also use it as leverage. Data protection should be a priority, "it is time to stop with hypocrisy when it comes to collecting and managing data and be transparent, or actually limpid, on the use we make of customers' data". A transparent strategic use of big data can create value for both viewers and PSM organizations.

One of the objectives of data-driven strategies and data management platforms is to better understand our audiences, their behaviours and preferences. Only by improving our understanding can we then offer enhanced viewer interaction, personalized content, and targeted advertising. It is a matter of striking a mutually advantageous bargain with your customers, as Head of Advertising R&D of Channel 4 Martin Greenbank stated, "We give them personalized content, in exchange for data and targeted advertising".

However, the primary focus should be on the consumers' experience rather than 'simply' increasing advertising revenues. On this subject, Pierre-Nicolas Dessus, Director of Digital Marketing at France Télévisions, reflected on the ambiguous role of social media platforms, such as Facebook: they can be partners for PSM as they increase audience reach and leverage marketing strategies, but they can be parasites when it comes to owning and using audience data.

In conclusion, we share Ludovic Levy's advice that PSM should focus on what differentiates them from OTT providers: the combination of a secure use of data and an offer of original content. "Fighting OTTs alone will not help to move forward in the digital market, instead, PSM should come together, share their experiences and best practices on the use of big data, and leverage on their remits and on what they represent for society."

5. MY FAVOURITES: DEVELOPING (AND RETAINING) DIGITAL AUDIENCES

Nowadays PSM organizations need to address audiences' new consumption habits, using a variety of media and platforms and claiming 'content anytime, anywhere'. At the same time, they are in a fiercely competitive sector with new players that may not create content but develop business around providing content. In this context, communication plays an important role in gaining market share.

The message is mostly centred on "meeting users' needs and expectations with personalized content and spot-on recommendations". Personalization and recommendations are not new but certainly technology is now enabling users to be authenticated and big data to be used to analyse consumption patterns.

As Head of myBBC Jonathan Peachey argued, it is therefore becoming more relevant than ever to aim at "giving audiences what they love by understanding what they do". Innovation is essential to avoid the pitfalls of the past, such as collecting and managing inconsistent data or providing the same "not so personalized" recommendations.

Recommendation systems are based on a vast amount of information from the platforms used to access content, including consumption data, user profiles and a description of the content being watched.

However, from his experience as Head of Audience Insight at YLE, Aleksi Rossi_pointed out that sometimes managing such large quantities of data could be 'toxic' so PSM organizations should instead focus on "smarter smaller data,", rather than "big data."

Finally, digital media expert at RTS Michael De Lucia highlighted the importance of establishing a new two-directional relationship with a more engaged audience. While it is of strategic value for PSM to know whether their offer is right for their audiences, in order to reflect their remits and values PSM recommendations should avoid narrowcasting and create an opportunity for audiences to discover new content while promoting European cultural diversity.

Big data is no doubt tomorrow's backbone of PSM business intelligence and PSM organizations are paying due attention to how to launch data-driven strategies to enhance their services. The EBU Big Data Initiative provides a platform for sharing knowhow, insights, advice and best or bad practices.



6. INTERACTIVE WORKSHOPS

Whereas on the first day we broadly tackled the challenges and opportunities of the use of big data in PSM organizations, the second day was intended to reach a deeper level of interaction between EBU Members in four themed workshops. During these participative sessions Members shared their experiences, views, and ideas, and took part in insightful discussions, all within a limited but hectic timeframe. We kicked off with two interactive workshops respectively on recommendation systems and audience trust, followed by two more sessions on data journalism and management and skills for the best use of data.

WORKSHOP 1:

RECOMMENDATION SYSTEMS

The Recommendation systems workshop was moderated by three experts: Robert Amlung, Head of Digital Strategy at ZDF, Michael de Lucia, Head of Media Innovation at RTS, and Michael Barroco, Senior Project Manager at the EBU. Although personalization and recommendation are not new concepts, technology is now mature enough to provide more customized services. However, the main question is, how far can PSM go given their remits? Public service broadcasters must become more data-driven to adapt to changing audiences, but without tending towards extreme narrowcasting. Editorially controlled content matching user preferences with a richer offer is more appropriate since it allows editor's push to fulfill PSB's mission in line with their values. It cannot simply be personalization and recommendation, but must be a balanced mix.

WORKSHOP 2:

BUILDING TRUST WITH OUR AUDIENCES

The workshop on Building trust with our audiences was organized by Anne-Catherine Berg, Senior Legal Adviser, together with Lucy Campbell in the framework of the EBU Big data and data trust principles workflow and the related EBU Data Principles working group. This group comprises various experts from Members in different sectors (i.e. legal, public affairs, data, marketing) and has been working on a proposal for common highlevel data principles which should reflect the EBU's declaration on core PSM values, i.e. universality, independence, excellence, diversity, accountability, and innovation. During this session, the moderators prompted participants to share their views on such principles and to reflect more broadly on how PSM privacy and data protection policies require the responsible use of data and a trusted relationship with the audience.

WORKSHOP 3: **DATA JOURNALISM**

During the third session, on Data Journalism, Marianne Bouchart, Communications Director & Data Journalism Awards Manager at the Global Editors Network, shared the tricks of the trade. Nowadays, journalists need to acquire new skills to keep up with the amount of information available online, and being able to work with big data and large datasets is one of them. In this workshop, participants learnt the basics of data journalism: how to start, where to find data, how to clean the data, how to strategically interrogate data, and how to visually present them. In a nutshell, it was a hands-on session with practical advice on the best tools and websites for mastering data journalism.

WORKSHOP 4:

MANAGEMENT AND SKILLS FOR A BEST USE OF DATA

Finally, in the fourth workshop on Management and skills for a best use of data, rather than discussing theoretical issues of big data, Marc Wray, Head of Training at BBC Academy, tackled the practical and organizational issues behind a successful big data strategy. The moderator directly challenged participants, claiming that even though we constantly talk about 'big data,' in the end "size does not matter!" Even though 95% of data collected at BBC is not being used, this should not be seen as a weakness because "what matters more than what you've got, is what you do with it!" In other words, to make the best use of big data, PSM should firstly set clear goals - why we need certain data - then they should proceed in collecting and storing only data that matters and are relevant for their needs. while constantly reassessing the usefulness and relevance of such data. Moreover, they should invest in educating and training their staff in order to create a dedicated team with interdisciplinary members. ranging from data experts to editorial curators. Skills and goal-driven strategies are essential to successfully transform a media organization with big data.

EBU-RTS HACKATHON

The Big Data Week concluded with the EBU-Radio Télévision Suisse Hackathon_on 23 & 24 March. The hackathon brought together journalists, social media experts, data experts and designers to reinvent digital storytelling to cover the refugee crisis. International partners, including Google News Lab, YouTube and the UNHCR also shared their insights and provided guidance throughout the event.

The aim was to gather an interdisciplinary audience to give an opportunity not only for data experts, but also journalists, social media experts and developers to network and learn about techniques, tools and approaches.

Moreover, the event also gave participants concrete challenges to encourage them to find creative and collaborative solutions. This included dataset comparisons, data clarification (e.g. refugee and/ or migrants) and proximity. This latter term refers to providing audiences with stories that may not seem relevant to their daily lives.

The exchange of experiences, training and knowledge created an inspiring environment and stimulated participants to find creative solutions. In the end, two projects stood out, and the winning team, chosen in a popular vote by the other participants, was led by four journalists from SR and UR. Their idea, which they called 'Refugo', was for an app that provides refugees with facts, accurate information and the latest news about Europe. It aims to dispel myths, misinformation and rumours to keep people safe, and it is part curation and part data aggregator.

Meanwhile, RTS has expressed a strong interest in continuing to develop *I Could Be You*, a project pitched by a team led by RTS, Rai and SWR. Using data collected by the UNHCR the project is a social storytelling app aimed at portraying refugees as real people, with relationships, interests and ambitions. The app could appeal to anyone, but really targets teenagers and has strong educational value.



NEXT STEPS: PRIORITIES AND ACTIONS

The EBU Big Data Week was the launch event of the EBU BDI which is now developing the four different workflows to prepare recommendations on how PSM should use big data within their organizations. The purpose is to offer a platform for sharing know-how, recommendations, insights and guidelines for EBU Members and beyond. Indeed, as Guillaume Klossa, EBU Director of Public Affairs & Communications and EBU BDI leader stated. "The challenge for us is to develop a mind-set to integrate this new dimension into our daily work. We are at the beginning of this learning process. Now we need to unite to speed up our learning curve, and develop a strong and relevant

strategy to lead, rather than follow".

There are four main priorities for the next steps of the project.

PRIORITY 1: **BIG DATA - FINAL REPORT**

Firstly, we are preparing the BDI final report which will give an overview of the concrete outcomes of the project and most importantly present recommendations on how EBU Members can implement big data strategies. Recommendations will be given for each workflow in order to address the various challenges and topics. The final report is expected by the end of 2016 in time for the EBU Winter General Assembly.

PRIORITY 2: **WORKFLOWS AND ROADMAP**

Secondly, we are developing the four parallel workflows and finalizing a roadmap for the BDI, including the continuation of the project in 2017.

PRIORITY 3: THEMED WORKSHOPS WITH MEMBERS

Thirdly, we plan to organize EBU Members' themed workshops to explore the most crucial big data topics. The joint organization of these workshops will constitute an essential part of the future developments of the BDI in the upcoming years. The first workshop, dedicated to data protection and privacy policy, was held at EBU Headquarters on 10 June 2016. This workshop fits into the data trust principle workflow, and its purpose is to reflect on possible shared high-level data principles and foster the exchange of good practices between Members. Moreover, we are working with France Télévisions on a seminar on the use of algorithms and recommendation systems, and we are in contact with various Members to prepare a series of workshops in 2016-2017.

PRIORITY 4: **BIG DATA COMMUNITY**

Last but not least, we are developing the big data community and networking by means of a strong communication plan aimed at actively engaging EBU Members on a dedicated web space at www.ebu.ch, featuring a newsletter and a blogspace for Members to present big data-related projects, make suggestions, and share best practices and information on past and future events.



STEERING COMMITTEE



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