

Media Futures.

Research Centre for Responsible
Media Technology & Innovation

Annual Report
2021



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Host Organisation



Research Partners



User Partners



Ethics Committee



WP Advisory Committee



Affiliates



Associates



CEDAS
Center for Data Science



Industry Cluster Partner



Media City
Bergen

Funding Agency



Forskningsrådet

In memory of **Anne Jacobsen**,
the CEO of Media City Bergen and Media Innovation Norway

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Kulturoperatørene

MediaFutures
home at
Media City Bergen

Photo: Zulfkar Fahmy, UIB

Words from the Centre Director

2021 marked 2 years of the COVID-19 pandemic that upended our lives and highlighted the importance of adaptability. Despite many challenges, MediaFutures' researchers, scholars, partners, students, and staff found many ways to flourish and deliver impactful research, innovation and high-quality work.

2021 was a year for laying foundations, increasing our staff, conducting research, forging new alliances, and beginning outreach.

The year started with a digital opening of the centre on February 2nd and with the launch of the MediaFutures' website, and of other communication channels. We then set up a physical 500m2 space in Media City Bergen – a leading international hub for media and technology innovation, and worked tirelessly on further recruitment.

In the first year of operation, MediaFutures hired 26 highly experienced and skilled researchers and administrative employees. We published 16 scientific publications in peer-reviewed conferences and journals, and attended several workshops. During 2021 we established the MediaFutures seminar series, and subsequently hosted 18 seminars with international researchers and experts across all Work Packages. Our first Annual Meeting, with over 70 guests from Norway and abroad, among them two international keynote speakers, turned out to be a huge success. Finally, the year brought inclusion of two new user partners: Wolftech Broadcast Solutions AS and The National Library/Språkbanken.

In spite of disruptions arising from the epidemiological situation, MediaFutures' team put great efforts into making the most out of 2021. We thank everyone who contributed to MediaFutures' success over the past year, and present you with the Annual Report comprising information and content that chronicles the Centre's growth and achievements in 2021.


**Professor
Christoph Trattner**
Centre Director





Media City
in the center
of Bergen

Our Strategy

Vision

To establish a world-class research centre for responsible media technology and innovation that seeks to solve profound global, industrial, and democratic challenges in the media-tech industry.

Primary Objective

The main goal of MediaFutures is to generate substantial innovation and value creation for the Norwegian news media and media-tech industry and to empower them to solve profound global, industrial, and democratic challenges through long-term research into responsible media technologies.

The following are verifiable secondary objectives that will lead to the achievement of the primary objective:

Create an accessible physical and highly innovative research centre in the heart of Norway's premier media cluster, Media City Bergen, for collaboration at a global level (all WPs).

Turn coherent research on societal changes (WP1, WP4), user behaviour (WP1, WP2, WP4), and language technology (WP5) into new products, services, and businesses (all WPs) not only addressing markets in Norway, but also globally.

Maintain regular active communication and knowledge sharing (including secondments/staff exchange, presentations, workshops, and seminars) by both industry and academic partners in order to ensure an easy path from basic research to final products (all WPs).

Research approach

MediaFutures addresses the development of responsible media technology for the media sector, in particular leveraging AI technology, by bringing together the complementary knowledge of the strongest research groups and media tech companies in Norway for the first time. The commitment and involvement from each of MediaFutures' partners is important for ensuring that its activities and research results are relevant for both its user partners and the scientific community at large.

The complimentary yet diverse research lines, e.g., from AI and Machine Learning to Human Computer Interaction (HCI), have been designed to address the pressing needs of a changing media landscape and to supply the industry with the knowledge it needs to create new products and services for whatever comes next.

AI technology has been shown to be of great value in many different application domains; however, it has also raised significant ethical issues, including, for example, the creation of echo chambers in online media systems, political polarisation, and controversial or questionable election outcomes.

Innovations and value creation

MediaFutures will during its 8 years of project life develop advanced new media technology for responsible and effective media user engagement, media content production, media content interaction, and media accessibility, and it will conduct research on novel methods

and metrics for precise audience understanding. Both the research and industry partners participate in the research and innovation activities on topics of relevance for their organisations as well as for the centre.

The knowledge created in MediaFutures is used by its user partners to build new products and services. This will happen both within the existing companies and within spin-offs resulting from the centre's activities. The different internal strategies, plans, and needs of the user partners have been elicited over the course of the development of the centre proposal.

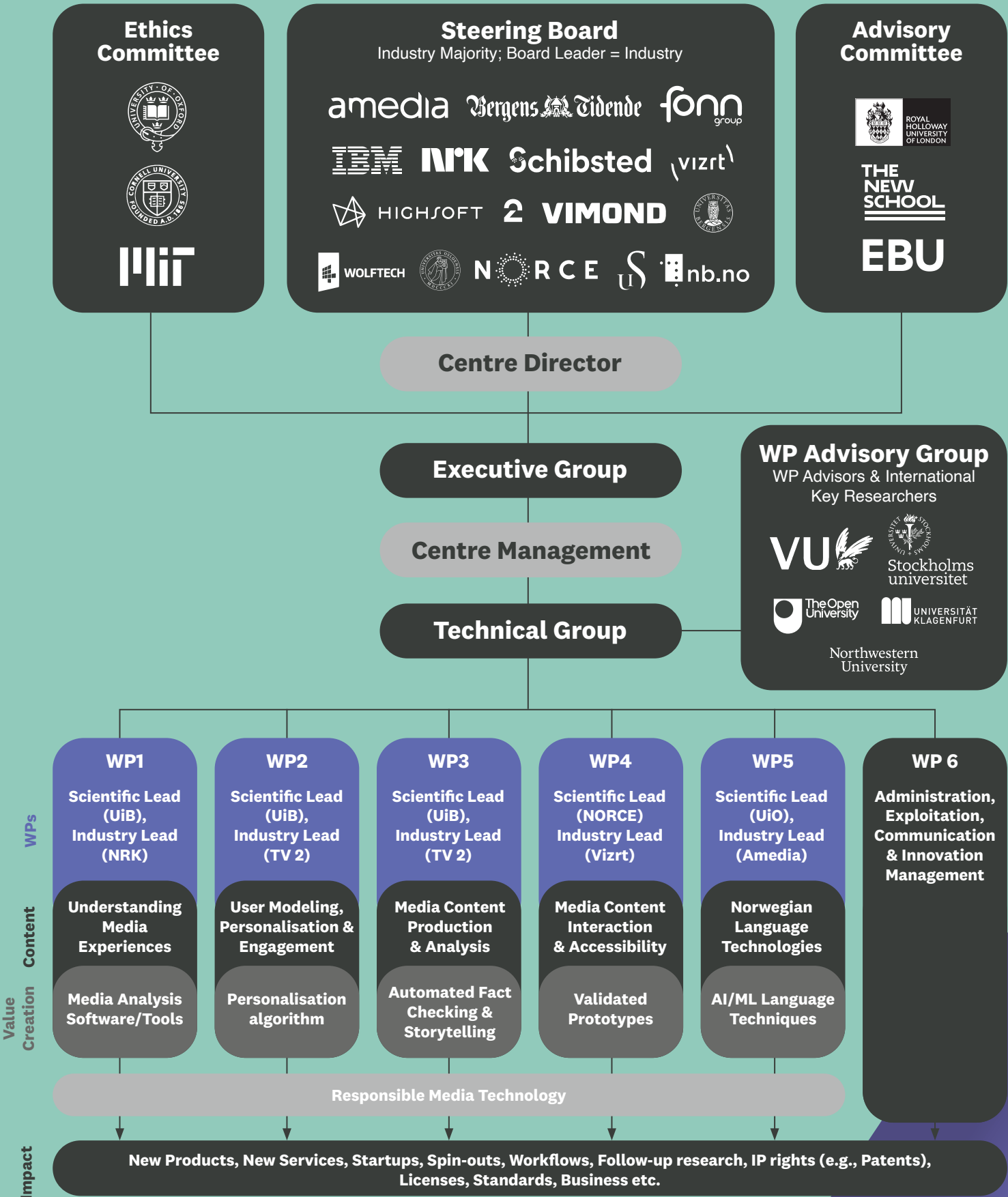
Research training and recruitment

MediaFutures will produce at least 12 PhDs and will train 9 postdoctoral fellows. In 2021, 9 PhD and 4 postdoctoral fellow positions have been filled in.

The recruited fellows' projects are formulated in collaboration with the user partners in order to respond to industry-specific challenges and needs. Master's student projects will also be involved based on user partners' needs. The students will gain research experience as well as valuable industry insights.

MediaFutures seeks to collaborate with relevant research schools and encourages affiliated researchers to attend summer and winter schools in order to obtain and expand upon on their knowledge and specific skills within relevant research areas, as well as soft skills training (communication, teamwork, work ethics, etc.).

Our Organisation



Governance structure

MediaFutures is organised through governance bodies involving all partners as well as leading experts in the field of media and technology:

The day-to-day running of MediaFutures is carried out by the Centre Management supported by a Steering Board, an Executive Group, an Advisory Committee, and an Ethics Committee. Each research WP is run by one scientific leader and one industry Co-leader. The WP leaders and the Centre Management meet every other week in the Technical Committee. The WPs are in addition supported by the WP Advisory Group who meet regularly with the WP leaders and the Centre Director to provide feedback and input on the work-in-progress on the WP level.

Collaborators

MediaFutures combines the expertise of nationally and internationally renowned media-tech researchers with the expertise of both the strongest domestic media and media-tech entities (such as NRK, TV 2) as well as Norwegian media-tech multinationals with high global market penetration (such as Vizrt and Highsoft).

We have also established international collaborations through several governance bodies involving leading experts in the fields of media, information technology, ethics, etc. Our collaborators and advisors include internationally renowned experts from The European Broadcasting Union (EBU), Switzerland; The New School's Parsons School of Design, US; Northwestern University, US; Royal Holloway University of London, GB; Massachusetts Institute of Technology, US; Cornell University, US; University of Oxford, GB; The Vrije Universiteit Amsterdam, NL; The University of Klagenfurt, AT; The Open University, GB; and Stockholm University, SE.

8

years
duration

5

research and
innovation WPs

12

PhD
students

9

Postdocs

~100

people involved (scientists,
technical staff, executive level,
and supporting staff)

263.5

million NOK total budget

96

million NOK funding
from Research
Council of Norway

98.5

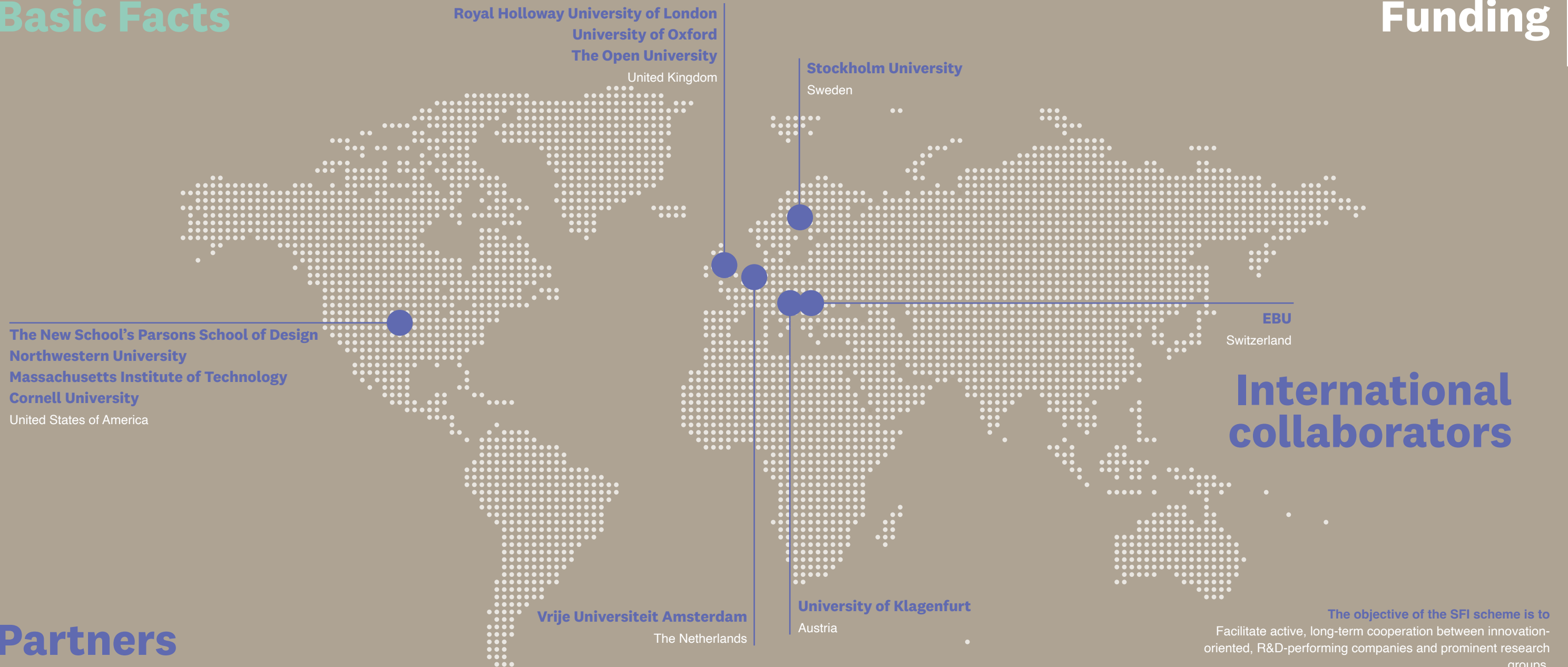
million NOK industry
funding

69

million NOK research
partners' in-kind
contribution

Basic Facts

Funding



International collaborators

The objective of the SFI scheme is to
Facilitate active, long-term cooperation between innovation-oriented, R&D-performing companies and prominent research groups.

Promote the development of outstanding industry-oriented research clusters that are an integral part of dynamic international networks and that enhance the internationalisation of the Norwegian business sector.

Encourage and enhance researcher training and the transfer of knowledge and technology in areas with major potential for future value creation.

Partners

4

research
partners

UiB
UiO
UiS
NORCE

12

industry partners

Schibsted
NRK
TV 2
BT
Amedia
Vizrt

Highsoft
Vimond
Fonn Group
IBM
The National Library of Norway
Wolftech

About the Norwegian Scheme for Research-based Innovation (SFI):

The SFI scheme is a national scheme under the auspices of the Research Council. The Research Council provides the basic funding for the centres that are given SFI status under the scheme for a period of up to 8 years.

WP1

Understanding Media Experiences

WP1

Involved partners

University of Bergen, Vrije Universiteit Amsterdam, BT, NRK, Schibsted

WP objectives

To provide fundamental knowledge on how users will interact with the media of the future by monitoring and understanding users across content and media through advanced quantitative and qualitative approaches.

WP background

With the datafication of everyday life, increasingly powerful platforms, and intensified competition for attention, media users face a media environment that is increasingly perceived as intrusive and exploitative of their data traces. This situation causes ambivalence and resignation as well as immersive and joyful media experiences. Understanding these experiences is crucial to democracy as media use continues to be central for public connection and citizens' information about and engagement in society. In addition to making sense of media usage through metrics such as clicks, time spent, shares, or comments, critical attention to problematic representations of datafication should be bridged with broader and deeper understandings of media as experience.

New Knowledge

The collaboration between the Bergen Media Use Research Group at UiB and user partners in the centre will generate new knowledge from a dual strategy that will (i) monitor users across media with state-of-the-art tracking devices – with critical attention paid to the limitations of such methods – combined with surveys and survey experiments, and (ii) will seek to understand future media experiences through qualitative in-depth explorations of emerging and transformative media use. The WP will provide a knowledge foundation for other WPs in the centre to build on and will bring novel research insights on audience analysis to industry partners.



Brita Ytre-Arne
Professor, WP Leader,
University of Bergen



Hallvard Moe
Professor, WP Co-Leader,
University of Bergen



Kristian Tolonen
Industry WP Co-Leader,
NRK

WP2

User Modeling, Personalisation & Engagement

Photo: Cottonbro, Pexels.com

WP2

Involved partners

University of Bergen, University of Stavanger, Vimond, Amedia, BT, IBM, Schibsted, NRK, TV 2.

Objectives

To develop user modeling and personalisation techniques capable of effectively eliciting user preferences in order to enhance the user experience when interacting with media content while taking into account important competing factors (e.g., business values, societal values, and individual values).

Background

The use of recommendations enables media applications to support users in discovering additional media content (e.g., news articles, videos) and to keep consumers engaged. The main challenge in this context is that the recommendation approach has little potential for the discovery of new types of content for the consumer, and they might cause popular media content to become even more popular. Such problems can ultimately lead to filter bubbles, echo chambers, or group-think conditions.

New Knowledge

This WP addresses undesired phenomena such as degenerative feedback loops likely originating from current personalisation and recommendation techniques. This will be done by computing responsible (predictive) models for fair recommendations that will enhance user engagement through novel mechanisms by (i) providing explanations of recommendations to users (transparency), (ii) expanding recommendations to cover a rich spectrum of media content (diversity), and (iii) ensuring that niche or minority content is suggested to users (fairness). Another outcome will be novel recommendation algorithms taking into account multiple competing objectives (e.g., relevance vs. information balance).



Mehdi Elahi
Assoc. Professor,
WP Leader,
University of Bergen



Christoph Trattner
Professor, Centre Director,
WP Co-Leader,
University of Bergen



Lars Skjærven
Industry WP Co-Leader,
TV 2

WP3 Media Content Production & Analysis

Involved partners

University of Bergen, University of Stavanger, Open University, BT, Fonn, IBM, Schibsted, TV 2, Vimond, Wolftech Broadcast Solutions

Objectives

We aim to develop solutions that produce verified and relevant content while employing engaging narratives. We will collaborate closely with media production companies to integrate and test the methods and tools we develop in realistic production settings, thus increasing industry relevance. Our ultimate objective is to analyse user-generated and other media content with respect to quality and validity, to extract data, information, and knowledge from media content, and provide this to algorithms that support (semi-)automated multi-modal content production.

Background

WP3 will produce novel tools for computational journalism to produce quality content in terms of both trustworthiness and engagement and will produce fact-checking software. Central research questions are: How can we computationally produce unbiased, high-quality, multi-modal content? How can we analyse user-generated content in order to generate more valuable insights?

New Knowledge

Computational support for fake news detection – encompassing multimedia forensics techniques and fact checking – will be integrated within an adaptive platform supporting new content generation. The latter will be supported not simply through domain-specific search engines, and we will also employ sophisticated AI techniques for narrative generation. Here, the key element will be the use of news angles as a mechanism to support the creation of genuinely original content.



Andreas L. Opdahl
Professor, WP Leader,
University of Bergen



Bjørnar Tessem
Professor, WP Co-Leader,
University of Bergen



Are Tverberg
Industry WP Co-Leader,
TV 2

WP4

Media Content Interaction & Accessibility

Photo: Elia Pelligrini, Unsplash.com

WP4

Involved partners

University of Bergen, NORCE Norwegian Research Centre, Stockholm University, Highsoft, NRK, Schibsted, TV 2, Vizrt

Objectives

The work package will develop methods and technologies for interaction between media content and users, both humans and computerised, and for providing personalised, adapted media experiences to all users regardless of their technical aptitude or personal needs.

Background

Tomorrow's media experiences will combine sensor technology (instrumentation), AI, and personal devices (interactivity) to increase engagement and collaboration. Enablers such as haptics, AR/VR, conversational AI, tangible interfaces, wearable sensors, and eyes-free interactions have made clear progress. Hence, media experiences will become more individualised and will target the preferences and circumstances of each user (adaptation) by making use of a variety of device categories offering alternative capabilities.

Research into adaptation includes responsive user interfaces, adaptive streaming, content adaptation, and multi-device adaptation. Adaptation is also needed for collaborative and social use. Finally, media experiences must be inclusive and available for all (accessibility). Research into accessibility includes screen readers and AI-based techniques for the generation of adapted content such as audio tracks for the visually impaired, video interpreters for the deaf, and individualised narration.

New Knowledge

The WP will focus on making media experiences more accessible to all users by exploiting personal devices to perform personalised adaptations. Adaptations can be based on physical requirements like visual or auditory impairments, age-related adaptations like age-appropriate visualisations, the technical knowledge levels of the users, the availability of sensors or specialised hardware, etc. The personal devices will also be used in social settings, e.g., using a phone to make personal adaptations even if multiple people are watching something on a shared TV.



Njål Borch

Senior Researcher,
WP Leader,
NORCE Norwegian
Research Centre



Morten Fjeld

Professor, WP Co-Leader,
University of Bergen



Petter Ole Jakobsen

Industry WP Co-Leader,
Vizrt

WP5 Norwegian Language Technologies

Involved partners

University of Bergen, University of Oslo, Amedia, IBM, Schibsted, TV 2, the National Library of Norway

Objectives

To develop language technologies for the Norwegian language. Datasets and advanced models for Norwegian (Bokmål/Nynorsk) that support the automated understanding as well as the automated production of media texts in this language will be developed and made available using state-of-the-art approaches in machine learning and AI.

Background

WP5 adopts theoretical approaches and methodologies primarily based on linguistic data science, including neural learning. Based on language data in the media from our user partners and the data and tools of our research partners, large corpora will be annotated. The labelled examples in these corpora will be used for training and evaluating supervised models that demonstrate advanced approaches in areas such as robust deep language analysis, adaptive language generation, event identification and extraction, and opinion analysis. The partners will cooperate to explore the use of such models for innovative purposes.

New Knowledge

The WP will focus on a range of linguistic tasks in the media domain and will apply novel machine learning algorithms to advance language technologies for the Norwegian language. Our commercial partners will provide us with the necessary language data, and annotated data and models for written Norwegian will be developed and made available.



Lilja Øvrelid
Professor, WP Leader,
University of Oslo



Koenraad de Smedt
Professor, WP Co-Leader,
University of Bergen



Emiliano Guevara
Industry WP Co-Leader,
Amedia

Scientific Activities and Results

As underlined in strategic plan, the primary objective of MediaFutures is to generate substantial innovation and value creation for the Norwegian media-tech industry. Such ambitious goal presupposes a close collaboration between the academia and the industry partners.

The epidemiological situation in 2021 required us to continue embracing a hybrid approach. To ensure regular contact and efficient knowledge transfer with our user partners, online platforms such as Teams and Zoom were of a great importance until August 2021, when subsequent, gradual ease in COVID-19 restrictions allowed for more physical interaction.

Despite the constraints, MediaFutures has a significant amount of innovation and research outputs to its credit. In 2021, the Centre has delivered:

- A prototype Pipeline of the Multimedia Recommender System capable of using side information
- A platform for image analysis from different social media platforms
- An early prototype of mid-level topic classification of news
- A prototype for creating angled news stories from tweets
- A multi-device synchronized, highly flexible media player created for experimentation, user testing and industry demonstrations
- AI based tools to largely automate processes in regards to creating necessary meta-data and additional data tracks for new services. In particular “Dynamic Aspect Ratio” has been brought quite far, allowing about 95% automated process. Interactive

tools have been made to validate/correct outputs as well.

- A number of other tools have been created to automate other processes in regards to enriching existing content, with a particular focus on “Dynamic Aspect Ratio” and “FancySubs” (contextual, “chat” style subtitles).

Additionally:

- Several enriched datasets have been prepared based on content from NRK. In particular: Valkyrien S01E01, Exit S02E01 and Vikingane S03E01 has been enhanced with FancySubs, both automated and manual Dynamic Aspect Ratio, audio description soundtracks, re-synchronized subtitles etc. Valkyrien also has a transparent sign language interpreter which can be automatically placed.
- A radio program “Svaltards” from NRK P3 has been subtitled with FancySubs and has been very well received
- The Norwegian Broadcasting Corporation has also acquired a new product for real-time subtitling of content. They have chosen a tool that allows them to add “who” to the subtitle, which is a large part of the “FancySub” demonstrator.
- Elevkanalen (TV2) has started experimentation with multi-device synchronized controls.
- Work Package 5 has made significant progress towards the creation of a new Norwegian Media Corpus. The goal is to create a large-scale and continuously updated corpus of news text, publicly available and in an uniform format. The plan is for the corpus to be released in 2022.

In the past year, great efforts have also been made in bringing the research and accomplishments of the centre to the attention of a broad audience. Listed below is an overview of MediaFutures team’s other scientific activities and results in 2021.

Popular dissemination

Nyre, L & Tessem, B. (2021). Beweekly column in Dag og Tid: Automatiske nyhende, 12 / Ting i internettet, 35 / Kvifor Google-briller vart ein fiasko, 39 / Kva datamaskiner kan gjere, 43 / Auka røynd, 8

Knudsen, E. (2021, May 7). Mediaundersøkelsen 2021: Har koronadekningen svekket tilliten til mediene? Nordiske Mediadager 2021.

Knudsen, E. (2021, September 24). The Promise and Perils of Algorithmic News Recommenders’ Influence on Democracy [Video]. TED Conferences, TEDxBergen2021.

Tessem, B. (2021, October). Når kunstig intelligens inntar redaksjonen. MCB Future Week 2021.

Arntzen, I. M., Borch, N. T. & Andersen, A. (2021, September 29-30). Unify Media and UX with Timed Variables [Poster]. MediaFutures Annual Meeting 2021, Bergen, Norway.

Borchgrevink-Brækhus, M. (2021, September 29-30). Why Won’t Young People Pay for News? [Poster]. MediaFutures Annual Meeting 2021, Bergen, Norway.

Dahl, J. M. R. (2021, September 29-30). What Can TV Companies Do for Teenagers Who Are on Their Phone All The Time? [Poster]. MediaFutures Annual Meeting 2021, Bergen Norway.

Elahi, M., Abdollahpouri, H., Mansoury, M. & Torkamaan, H. (2021, June 21-25). Beyond Algorithmic Fairness in Recommender System [Poster]. ACM Conference on User Modeling, Adaptation and Personalization.

Elahi, M., Moghaddam, F. B., Hosseini, R., Rimaz, M. H. & Trattner, C. (2021, June 1-2). Enhanced Movie Recommendation Incorporating Visual Features [Poster]. CEDAS Conference 2021, Bergen, Norway.

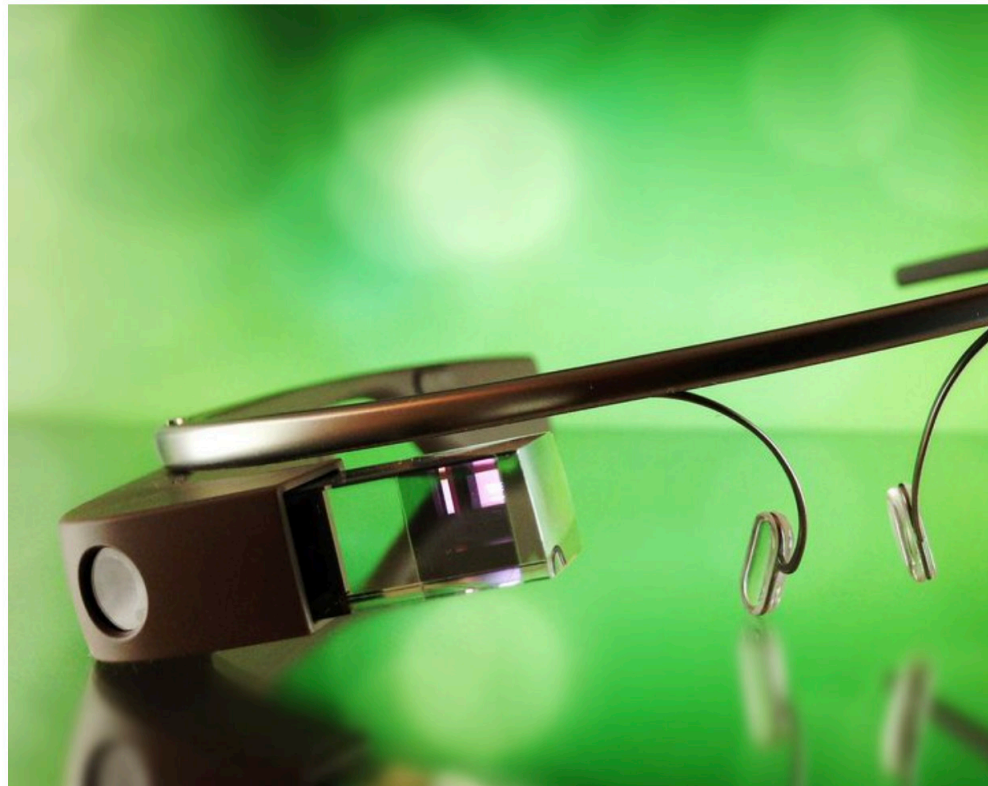
Knudsen, E. (2021, September 29-30). How Can News Sites Personalize Audiences’s News Experiences Without Making Audiences More Polarized and Fragmented? [Poster]. MediaFutures Annual Meeting 2021, Bergen, Norway.

Knudsen, E., Nordø, Å. D., Iversen, M.H. (2021, May 27-31). The Effect of the COVID-19 Pandemic Crisis on Trust in the News Media: Evidence From Three Panel Waves With a Pre-Crisis Baseline Erik Knudsen [Conference presentation]. 71st Annual ICA Conference, Virtual.

1. okt. 2021

Kvifor Google-briller vart ein fiasko

Teknologi



Milojevic, A. (2021, September 29-30). Datafication, Media and Democracy: Transformation of News Work in Datafied Society [Poster]. MediaFutures Annual Meeting 2021, Bergen, Norway.

Moe, H. (2021, October 31). Fake News og Mediebruk [Conference presentation]. Vestlandsseminaret.

Tessem, B. & Opdahl, A. L. (2021, September 29-30). Content Analysis and Production [Conference presentation]. MediaFutures Annual Meeting 2021, Bergen, Norway.

Touileb, S., Øvreid, L. & Velldal, E. (2021, November 17-18). Using Gender- and Polarity-informed Models to Investigate Bias [Poster]. NORA Annual Conference 2021, Bergen, Norway.

Other publications

Johannessen, Ø. (2021). Novel Methods Using Human Emotion and Visual Features for Recommending Movies [Master thesis, University of Bergen].

Knudsen, E. & Moe, H. (2021). En Analyse av Sammenhengen Mellom Bruk av NRKs Digitale Nyhetstilbud og Betalingsvilje for Digitale Nyheter. University of Bergen.

Kvifte, T. (2021). Video Recommendations Based on Virtual Features Extracted with Deep Learning [Master thesis, University of Bergen].

Recruitment in 2021



Pete Andrews
PhD Candidate, WP4,
UiB



Snorre Alvsvåg
Research Assistant, WP6,
UiB



Marianne Borchgrevink-Brækhus
PhD Candidate, WP1



Irene Costera Meijer
Work Package Advisor &
Key Researcher, WP1, Vrije
Universiteit Amsterdam



John Magnus Ragnhildson Dahl
PostDoc, WP1
UiB



Nicholas Diakopoulos
Work Package Advisor,
Northwestern University



Ayoub El Majjodi
PhD Candidate, WP2,
UiB



Torstein Hatlebakk
Research Assistant, WP3,
UiB



Ella Maria Holli
Research Assistant, WP1,
UiB



Dietmar Jannach
Work Package Advisor &
Key Researcher, WP2 ,
Universität Klagenfurt



Marius Hatland
Research Assistant WP6,
UiB



Oskar Juhlin
Key Researcher, WP4,
Stockholms Universitet



Sohail Ahmed Khan
PhD Candidate, WP3
UiB



Anastasiia Klimashevskaja
PhD Candidate, WP2,
UiB



Erik Knudsen
Researcher, WP1
UiB



Ulrik Wilhelm Koren
Research Assistant, WP3,
UiB



Ana Milojevic
Postdoc Research
Fellow, WP1
UiB



Enrico Motta
Work Package Advisor &
Key Researcher, WP3
The Open University



Malgorzata Anna Pacholczyk
Communication Officer, WP6 ,
UiB



Daniel Rosnes
Research Assistant, WP6,
UiB



Sebastian Einar Røkholt
Research Assistant, WP3,
UiB



Ghazaal Sheikhhi
Postdoctoral Fellow, WP3,
UiB



Alain Starke
Key Researcher, WP2,
UiB



Samia Touileb
Researcher, WP5,
UiB



Kata Urban
Research Assistant, WP6
UiB



Huiling You
PhD Candidate, WP5,
UiO

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International Cooperation

MediaFutures aims to enhance the quality of research and innovation through strategic partnership with world-leading research institutions, and by endorsing open recruitment across national borders, facilitating researchers' mobility, as well as by carrying out international joint events and activities.

In 2021, 26 employees - scientists and administrative staff representing over 15 nationalities- joined MediaFutures Centre. Due to the COVID-19 pandemic, cross-border staff mobility was significantly curtailed, and in many cases postponed.

The international cooperation in 2021 was mainly carried out online. In addition to the MediaFutures seminar series featuring researchers and expert guests from Scandinavia and beyond, the Centre has initiated partnership with UMass Boston's Applied Ethics Centre and established a panel-event series Boston-Bergen Forum on Digital Futures. The event series took place in October and November 2021, and it involved

two virtual panel debates: Technology and the Changing Face of Political Activism and AI and the Future of Protest Discourse. The event series was Co-sponsored by the Human Rights & Technology Program at the Massachusetts Institute of Technology.

In December 2021, MediaFutures, along with other research institutions, among them the Chalmers University of Technology in Sweden, had the pleasure of organising Human-Computer Interaction workshop for PhD candidates and industry representatives. The workshop was Co-funded by the Research Council of Norway and the Wallenberg AI, Autonomous Systems and Software Program – Humanities and Society (WASP-HS). This was the first in a planned series of workshops to come.

Efforts to ensure more international cooperation in the upcoming years are among MediaFutures' priorities. The Centre has hopes for an increase in the mobility of researchers in 2022.

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October 21st / 13:00 PM (EDT) 19:00 PM (CET) / Virtual Event

Panel 1: Technology and the Changing Face of Political Activism



Government surveillance of online speech and activism, and the ways organizers are fighting back

Kade Crockford

Director of Technology for Liberty Program, American Civil Liberties Union



Manufacturing Guilt

Gregory P. Garvey

Professor of Game Design and Development, Quinnipiac University



The point is to change it!

Anat Biletzki

Schweitzer Professor of Philosophy, Quinnipiac University

Moderation:

Nir Eisikovits UMass Boston

ORGANISERS:

University of Bergen
MediaFutures



CO-SPONSOR:



MIT CENTER FOR
INTERNATIONAL STUDIES
Human Rights Program

BOSTON-BERGEN FORUM ON DIGITAL FUTURES

Event-series of UMass Boston's Applied Ethics Center and MediaFutures Bergen

Panel 1: Technology and the Changing Face of Political Activism

October 21st / 13:00 PM (EDT) 19:00 PM (CET) / Virtual Event

Kade Crockford (American Civil Liberties Union)

Gregory P. Garvey (Quinnipiac University)

Anat Biletzki (Quinnipiac University)

Moderation: Nir Eisikovits, UMass Boston

Panel 2: AI and the Future of Protest Discourse

November 24th / 12:00 PM (EDT) 18:00 PM (CET) / Virtual Event

Stefano Bolognini (University of Amsterdam)

Thomas Brune (Freie Universität Berlin)

David Gauntlett (University of London)

Communication and Dissemination Activities

2021 turned out to be yet another year of changing restrictions and adaptation, as we continued to navigate through the COVID-19 pandemic. Despite the many disruptions, 2021 has been a year of significant achievements for SFI MediaFutures, also in terms of communication and dissemination activities.

In the past year, MediaFutures made efforts to increase the visibility of the centre, and raise awareness of its research and activities, as well as to communicate the value of its work to different stakeholders and the general public. To this end, SFI MediaFutures made full use of available channels and means,

ranging from communication science to a rich online offering of news, and social media content. Here are some of the highlights of MediaFutures' communication activities in 2021.

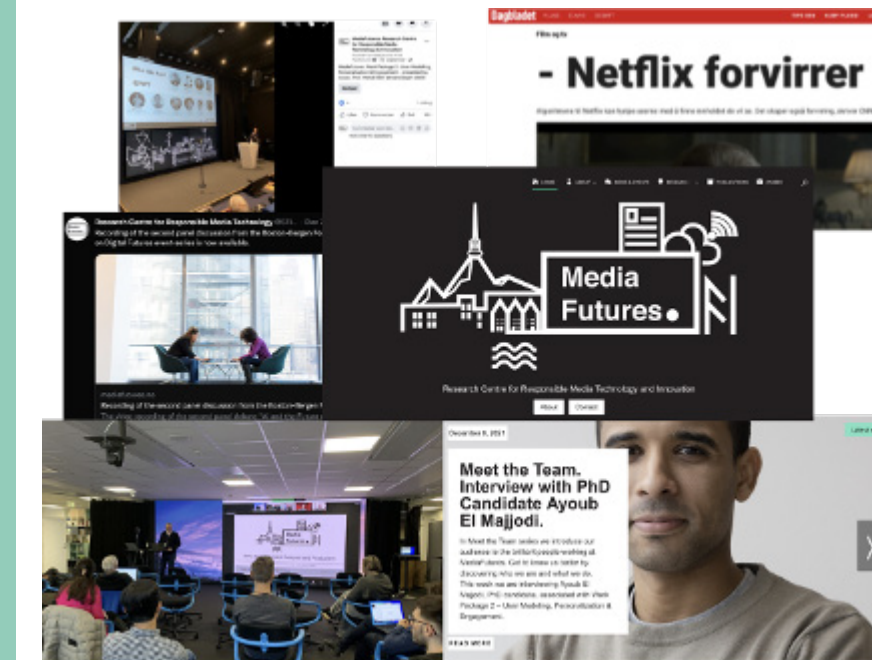
The Centre was officially opened on February 2. Due to the imposed COVID-restrictions, the opening was fully digital. The welcome address was given by MediaFutures director Prof. Christoph Trattner, the Norwegian Ministry of Education and Research, Henrik Asheim, and the University of Bergen's Rector, Margareth Hagen. Research and industry partners were invited to give video greetings.



We took advantage of all possible chances to engage with our stakeholders and policy makers. On November 16th, MediaFutures' director Prof. Christoph Trattner made a pitch presentation about the Centre to the Norwegian Minister of Culture and Equality, Anette Trettebergstuen. In December, the Centre was presented at the SFI-Forum in Oslo.

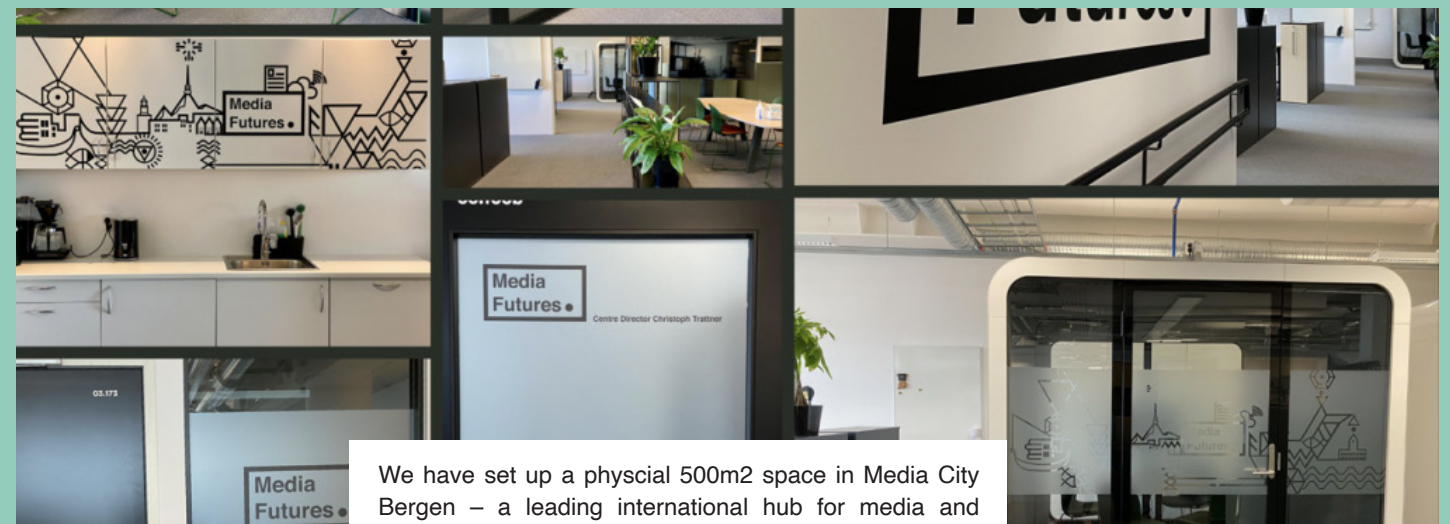


16 Nov - MediaFutures pitch to the Norwegian Minister of Culture and Equality, Anette Trettebergstuen



MediaFutures has published 15 research papers (journals & conference papers) in cutting edge outlets, and worked further on the public outreach. We have been keeping our audience updated with posts on the MediaFutures' website and social media accounts, as well as through our newsletter and Annual Report 2020. Our researchers were invited to many conferences and events such as ACM RecSys, 22 July at Ten, Future Week, TED x Bergen, as well as to give expert opinions in national media outlets.




We also conducted several workshops across all Work Packages. These were designed for MediaFutures scientists, industry representatives, as well as for PhD candidates, and aimed at facilitating discussions on topics of common interests and providing a platform for developing novel ideas.



We have set up a physical 500m2 space in Media City Bergen – a leading international hub for media and technology innovation.

In March, the Centre launched MediaFutures seminar series featuring national and international scholars and guest experts that gave presentations on topics relevant to the Centre's research areas. The seminars attracted a wide audience and resulted in interesting discussions and interaction.

MediaFutures' first Annual Meeting took place on September 29-30. The event, held as a hybrid conference, gathered over 70 participants from Norway and abroad, and offered its guests a mix of scientific talks, and presentations by Work Package leaders, as well as workshops and research poster session presented by PhD candidates, Postdoctoral Researchers and master students.

<p>04 May</p>  <p>Seminar: JECT.AI: Using digital technologies to augment work in the newsroom. Neil Maiden, City University of London</p> <p>Date May 4, 2021 Time 12-15 - 13:00 Venue Online</p> <p>ABSTRACT: This seminar will introduce JECT.AI, a new digital product for newsrooms that has emerged from previous research and development work. The use of AI technologies in newsrooms remains contentious. Therefore, the JECT.AI developers worked closely with journalist...</p>	<p>22 April</p>  <p>Seminar: DeepFact: Deep Learning for Automated Fact Checking. Vinay Setty, University of Stavanger</p> <p>Date April 22, 2021 Time 12:00 - 13:00 Venue Online</p> <p>ABSTRACT: The interest around automated fact-checking has increased as misinformation has become a major problem online. A typical pipeline for an automated fact-checking system consists of four steps: (1) detecting check-worthy claims, (2) retrieving relevant document...</p>	<p>20 April</p>  <p>Seminar: Reflections of Ourselves – Mobile Psychological Assessment with Smartphones. Clemens Stachl, Stanford University</p> <p>Date April 20, 2021 Time 14:00 - 15:00 Venue Online</p> <p>ABSTRACT: The increasing digitization of our society radically changes how we use digital media, exchange information, and make decisions. This development also changes how social scientists collect data on human behavior and experience in the field. One new form of data...</p>
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Publications

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Elahi, M., Kholgh, D. K., Kiarostami, M. S., Saghari, S., Rad, S. P., Tklacic, M. (2021). Investigating the Impact of Recommender Systems on User-based and Item-based Popularity Bias. Information Processing & Management 58(5).

Elahi, Mehdi; Moghaddam, F. B., Hosseini, R., Rimaz, M. H., El Ioini, N., Tkalcić, M., Trattner, C., Tillo, T. (2021). Recommending Videos in Cold Start with Automatic Visual Tags. UMAP'21: Adjunct Proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization.

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Kvifte, T., Elahi, M., & Trattner, C. (2021). Hybrid Recommendation of Movies based on Deep Content Features. Service-Oriented Computing – ICSSOC 2021 Workshops – AIOps, STRAPS, AI-PA, and Satellite Events, Dubai, United Arab Emirates, November 22-25, 2021, Proceedings. Lecture Notes in Computer Science.

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Starke, A. D., Larsen, S. Ø., Trattner, C. (2021). Predicting Feature-based Similarity in the News Domain Using Human Judgements. RecSys '21: Fifteenth ACM Conference on Recommender Systems.

Starke, A. D., Trattner, C., Bakken, H., Johannessen, M. S., Solberg, V. (2021). The Cholesterol Factor: Balancing Accuracy and Health in Recipe Recommendation Through Nutrient-Specific Metric. MORS 2021: Multi-Objective Recommender Systems 2021, 2959.

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Accounts

Costs per project partner (in NOK 1,000)	2020	2021
UNIVERSITETET I BERGEN (Host)	1 237	12 889
UNIVERSITETET I OSLO	42	542
UNIVERSITETET I STAVANGER		212
TV 2 AS	276	758
NORSK RIKSKRINGKASTING AS	33	80
NASJONALBIBLIOTEKET		136
SCHIBSTED ASA	101	988
INTERNATIONAL BUSINESS MACHINES AS	117	59
VIZRT NORWAY AS		220
WOLFTECH BROADCAST SOLUTIONS AS		72
BERGENS TIDENDE AS	72	188
VIMOND MEDIA SOLUTIONS AS		28
HIGHSOFT AS		10
AMEDIA AS		513
NORCE NORWEGIAN RESEARCH CENTRE AS	163	1 194
FONN GROUP AS		57
SUM	2 041	17 947

Funding sources (in NOK 1,000)	2020	2021
Own contribution (Host)	898	6 623
Public funding	42	404
Private funding	619	4 298
The Research Council of Norway	481	6 622
SUM	2 041	17 947

Personell

Centre Management

Christopher Trattner	UiB	Centre Director
Ola Roth Johnsen	UiB	Administrative Leader

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Kata Urban	UiB	Research Assistant
Snorre Alvsvåg	UiB	Research Assistant
Daniel Rosnes	UiB	Research Assistant

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Hallvard Moe	UiB	WP1 Understanding Media Experiences
Erik Knudsen	UiB	WP1 Understanding Media Experiences
Kristian Tolonen	NRK	WP1 Understanding Media Experiences
Christopher Trattner	UiB	WP2 User Modeling, Personalization & Engagement
Mehdi Elahi	UiB	WP2 User Modeling, Personalization & Engagement
Krisztian Balog	UiS	WP2 User Modeling, Personalization & Engagement
Helle Sjøvaag	UiS	WP2 User Modeling, Personalization & Engagement
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Andreas Lothe Opdahl	UiB	WP3 Media Content Production & Analysis
Duc-Tien Dang-Nguyen	UiB	WP3 Media Content Production & Analysis
Vinay Setty	UiS	WP4 Media Content Production & Analysis
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Morten Fjeld	UiB	WP4 Media Content Interaction & Accessibility
Frode Guribye	UiB	WP4 Media Content Interaction & Accessibility
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Petter Ole Jakobsen	VIZRT	WP4 Media Content Interaction & Accessibility
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Koenrad de Smedt	UiB	WP5 Norwegian Language Technologies
Erik Velldal	UiO	WP5 Norwegian Language Technologies
Samia Touileb	UiB	WP5 Norwegian Language Technologies

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Dietmar Jannach	Universität Klagenfurt	WP2 User Modeling, Personalization & Engagement
Alain Starke	Wageningen University & Research	WP2 User Modeling, Personalization & Engagement
Enrico Motta	Open University	WP3 Media Content Production & Analysis
Oskar Juhlin	Stockholms Universitet	WP4 Media Content Interaction & Accessibility
Nicholas Diakopoulos	Northwestern University	Work Package Advisor

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Ghazaal Sheikhhi	UiB	WP3 Media Content Production & Analysis

Postdoctoral Researchers working on projects in the centre with financial support from other sources

Ana Milojevic	UiB/MSCA	WP1 Understanding Media Experiences
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Anastasiia Klimashevskaiia	UiB	WP2 User Modeling, Personalization & Engagement
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Pete Andrews	UiB	WP4 Media Content Interaction & Accessibility
Jonathan Geffen	UiB	WP4 Media Content Interaction & Accessibility
Huiling You	UiO	WP5 Norwegian Language Technologies

PhD Candidates working on projects in the Centre with financial support from other sources

Ayoub el Majjodi	UiB	WP2 User Modeling, Personalisation & Engagement
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Master students

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Øyvind Johannessen	UiB	“Novel Methods Using Human Emotion and Visual Features for Recommending Movies”

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Sergiej Stoppen	Wolftech

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John Ellis	Royal Holloway University of London
Hans Hoffmann	The European Broadcasting Union
Alexander Rouxel	The European Broadcasting Union

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More information at
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Research Centre for Responsible
Media Technology & Innovation

**Annual Report
2021**

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