



NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF INFORMATION AND COMMUNICATION SCIENCE

DEPARTMENT OF JOURNALISM AND MEDIA STUDIES

BACHELOR OF SCIENCE (HONS) IN JOURNALISM AND MEDIA STUDIES

INFORMATION TECHNOLOGY FOR JOURNALISTS I

IJM 1120

Main Examination Paper

December 2024

This examination paper consists of 6 pages

Time Allowed: 3 hours
Total Marks: 100
Special Requirements: None
Examiner's Name: Mr. N. Dube and Mr. D. Ncube
External Examiner: Dr. C. M. Lunga

INSTRUCTIONS

1. **SECTION A** is Compulsory.
2. Answer **TWO (2)** questions in **SECTION B**.
3. Start each answer on a new page.
4. Poor spelling and grammar will be penalised.

MARK ALLOCATION

QUESTION	MARKS
1.	40
2.	30
3.	30
4.	30
5.	30

SECTION A

QUESTION 1

- (a) Identify and explain the TWO types of Artificial Intelligence (AI). **(5 marks)**
- (b) Create a map showing AI and its subfields **(5 marks)**
- (c) As discussed by Ogola (2023), identify and discuss the FOUR key areas in journalism that utilise AI. **(10 marks)**
- (d) Explore some of the challenges that African journalists face when integrating AI into their reporting, and how can these challenges be addressed to ensure responsible use? **(10 marks)**
- (e) Use Annexure A to answer the following questions:
- i. Explain the main reasons why the Norwegian Broadcasting Corporation (NRK) decided to use AI-generated summaries on its website. **(5 marks)**
 - ii. Explain how the use of AI tools in journalism, as demonstrated by NRK, could impact the workload of journalists and editorial teams. **(3 marks)**
 - iii. Identify the ethical considerations that a news organization should keep in mind when using AI-generated content. Relate this to NRK's implementation and editorial review process. **(2 marks)**

TOTAL

[40 Marks]

SECTION B

QUESTION 2

- (a) Explain the key differences in email etiquette between informal communication with colleagues and formal correspondence with news sources or professional contacts. **(5 marks)**

(b) Draft an example of a formal email that you would send to a professional contact requesting an interview for a news story. Ensure the tone is appropriate, and use a clear subject line. **(10 marks)**

(c) Discuss the importance of having a clear and concise subject line in this scenario. **(5 marks)**

(d) Email attachments have security and size limitations. Identify and discuss advantages of alternative methods and tools that can be used to share large file electronically. **(10 marks)**

TOTAL [30 Marks]

QUESTION 3

(a) Briefly define and describe the following terms giving examples:

i. Browser **(5 marks)**

ii. Encryption **(5 marks)**

iii. Storage **(5 marks)**

iv. Search engine **(5 marks)**

v. Software **(5 marks)**

vi. Computer memory **(5 marks)**

TOTAL [30 Marks]

QUESTION 4

Using examples, assess how the concept of 'fragmented public sphere' affects democracy in terms of shaping public discussions. **[30 Marks]**

QUESTION 5

(a) Compare and contrast between Social Construction of Technology and Technological Determinism. **(15 marks)**

(b) Natalie Fenton (2010) suggests that new media have transformed the way people communicate and interact. Identify and explain THREE key characteristics of new media according to Fenton, providing examples of how each characteristic has influence media practices today. **(15 marks)**

TOTAL

[30 Marks]

ANNEXURE 1:

How Norway's public broadcaster uses AI-generated summaries to reach younger audiences

Preliminary data suggests younger audiences are more likely to click on these summaries and readers who click on them spend more time with a piece.

The project in a nutshell

The Norwegian Broadcasting Corporation (NRK) recently began adding AI-generated summaries to many articles published on its website to appeal to younger audiences.

These summaries are made up of a handful of bullet points, which appear on published article pages in a pale blue box section just below the headline and feature image, with only the top of the summary visible unless the reader chooses to expand the box. Below is a brief message reading: "The summary is made by an AI service from OpenAI. The content is reviewed by NRK's journalists before publication." I talked to NRK's Knut Sætre and Thomas Nikolai Blekeli, who developed the tool, to find out more.

Norwegian audiences are moving away from traditional news sources. This is especially true for young people.

Norwegian statistics bureau Statistics Norway published the latest update in the Norwegian Media Barometer on 14 May. The Barometer collects data on media use (not necessarily for news) from a representative sample of the Norwegian population. The latest figures show a continued decline in the use of traditional forms of media, such as print newspapers, television and radio, as audio, video and use of the Internet rise. This pattern is particularly marked among young adults, a much sought-after and often elusive audience segment for traditional news media outlets.

Print newspaper consumption is very low in Norway among 16-24-year-olds, at only 3%, compared to 17% of the total population. TV and radio use is also in decline, while video and audio media such as podcasts are very popular.

Across all age groups, the use of typical news sources such as newspapers, radio and TV is decreasing both in their traditional form and their internet counterpart. Accessing news articles via the internet is also seeing a decrease from 2022 after a couple of years of slow rise.

This decline worries NRK. "We are losing young readers, but the whole media industry is losing young readers. And it's really hard to attract young readers to our stories, to our ordinary news sites," Sætre said.

"About five years ago, we developed some user principles after qualitative insights with a target group, aged 19 to 29. These principles contain several important guidelines for better reaching a younger audience. One of those principles was to break content into manageable chunks," Blekeli said.

In particular, the team wanted to allow readers to get a quick overview of the content so they could decide if it was worth their time. However, this extra task would be tough to fit into the journalists' busy workflow. "I thought, why not use AI as a tool to accomplish the tasks we can't get done ourselves?" Blekeli explained.

"We also discussed the difference between a lead text and a summary. When I started as a reporter, a lead would be kind of a summary, but more recently we use it more as a teaser ... a bullet point summary seems to work better," Sætre said. "Maybe it'll be a small tool to make the stories a little more accessible to young readers," he said.

Source: <https://reutersinstitute.politics.ox.ac.uk/news/how-norways-public-broadcaster-uses-ai-generated-summaries-reach-younger-audiences>