



# NTNU

Innovation and Creativity

## NEM position paper: Digital storytelling

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Department of Electronics and Telecommunications

Norwegian University of Science and Technology



WAN-IFRA <http://mid.wan-ifra.org/>

**Global Alliance for Media Innovation**



**NxtMedia**

# Content

- Who am I?
  - Professor at NTNU Trondheim
- What do I do?
  - Sensor based digital storytelling
- Why am I here?
  - Editor of the position paper on Digital Storytelling
  - Seeking input and contributions for the final version

**Andrew Perkis**

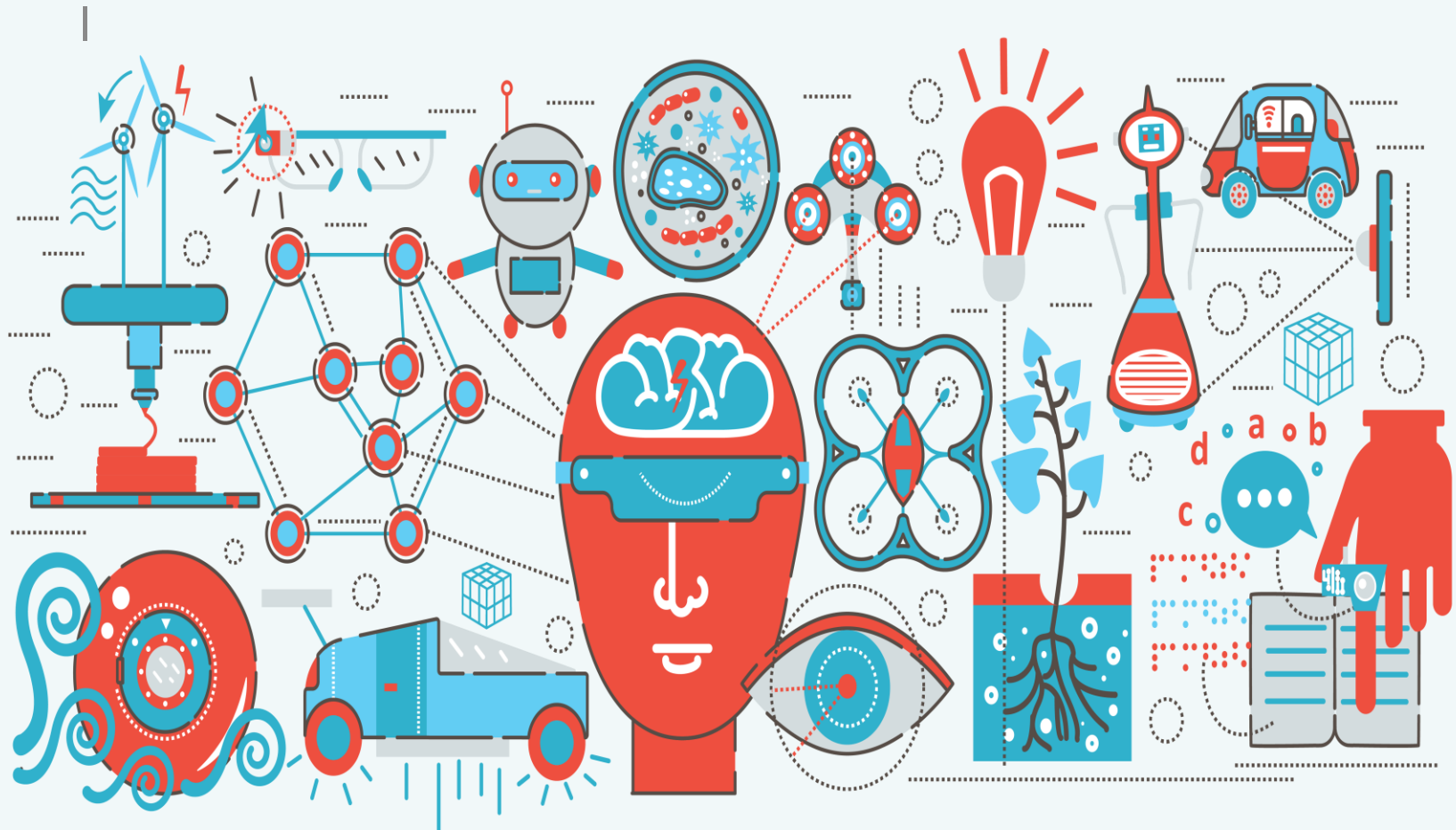
**Professor, Department of Electronics and Telecommunications, NTNU**

- **Speech coding, GSM (Mobile)**
- **Error resilience (Mobile)**
- **Information Theory, Joint source and channel coding**
- **Image compression, JPEG2000 (Broadcasting)**
- **MPEG-21 (Broadcasting, Media)**
- **Media Technology (Media)**
- **Digital Cinema**
- **IMTE (Art and Technology)**



# Sensor based digital storytelling

Prof. Andrew Perkis, Dr. Techn., MTM,  
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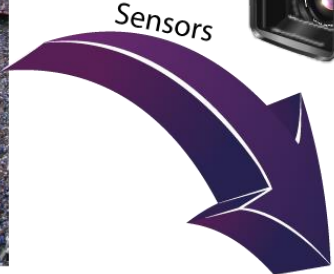




# Sensor based digital storytelling



# Sensor based digital storytelling



Sensors

Sensing & Capture



Changing the viewer into a participating, engaged and immersed user



Digital Story

Device & Display



Creates a Sense of Being There

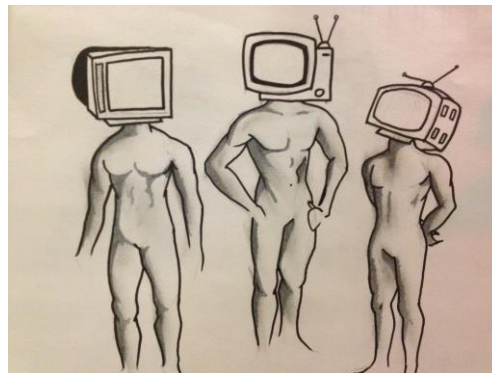


Delivery

# Challenges for storytellers

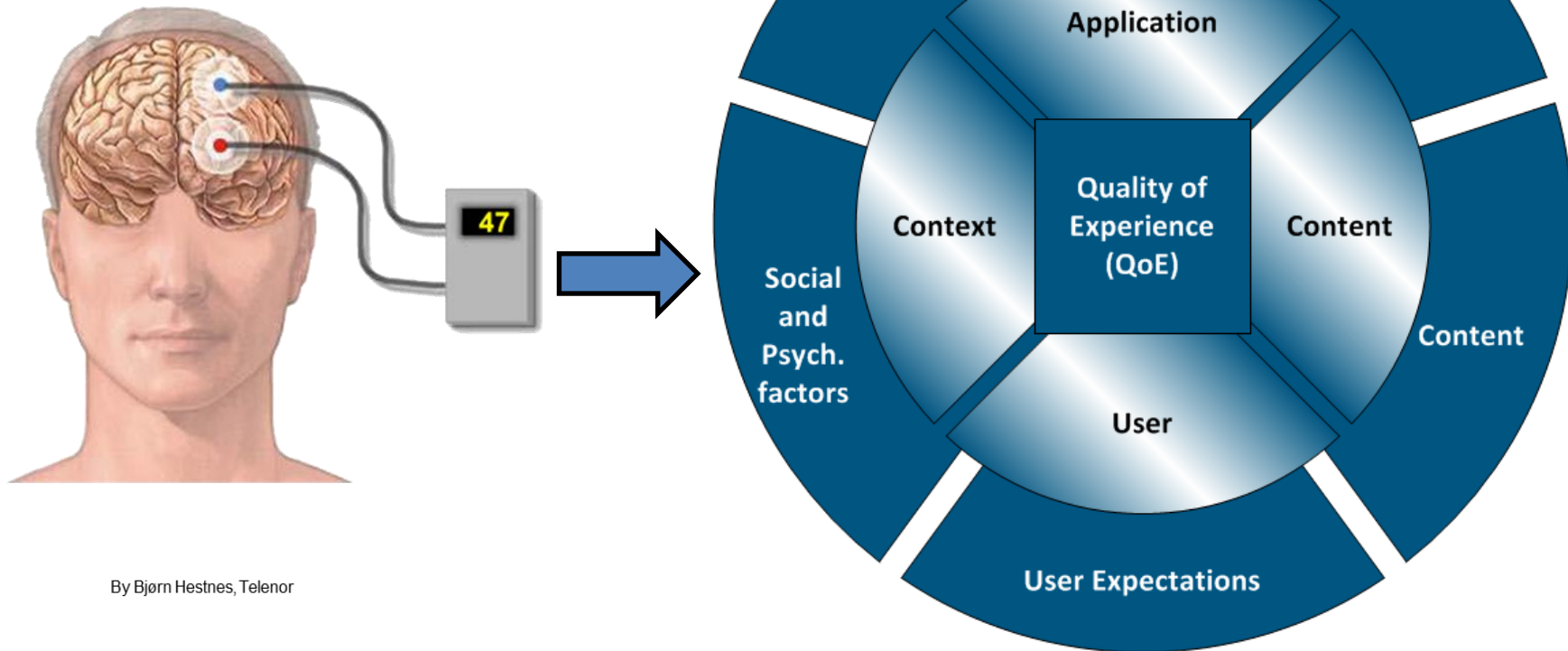
Immersive narratives: How do you tell a story surrounding the audience making them participants

- Content base
  - Sensor data
  - Archived Text, Audio, Video
  - Capture, 360 cameras
- Visualisation
  - Screens
  - Spaces
- GUI/NUI
  - Interaction





# Quality of Experience - QoE

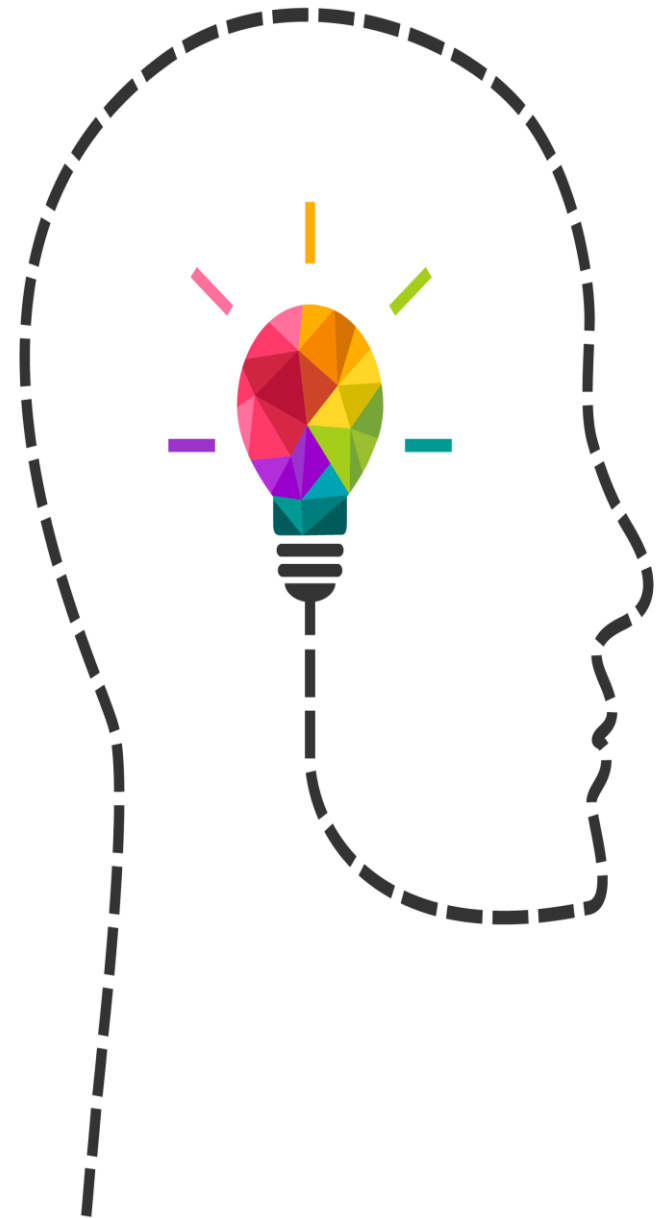


By Bjørn Hestnes, Telenor



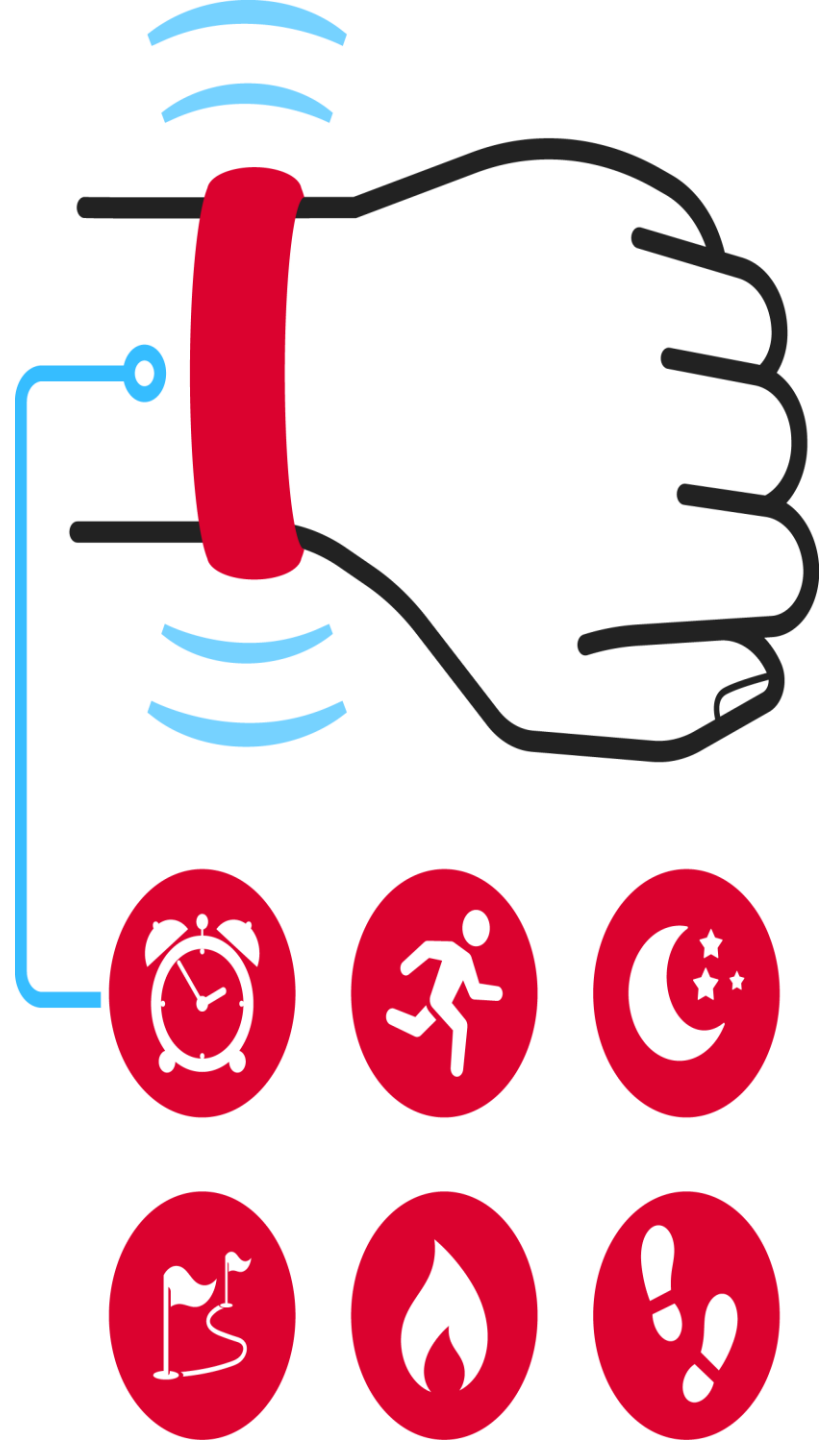
# What does it take?

**Creative narrative**



and ...

Sensors

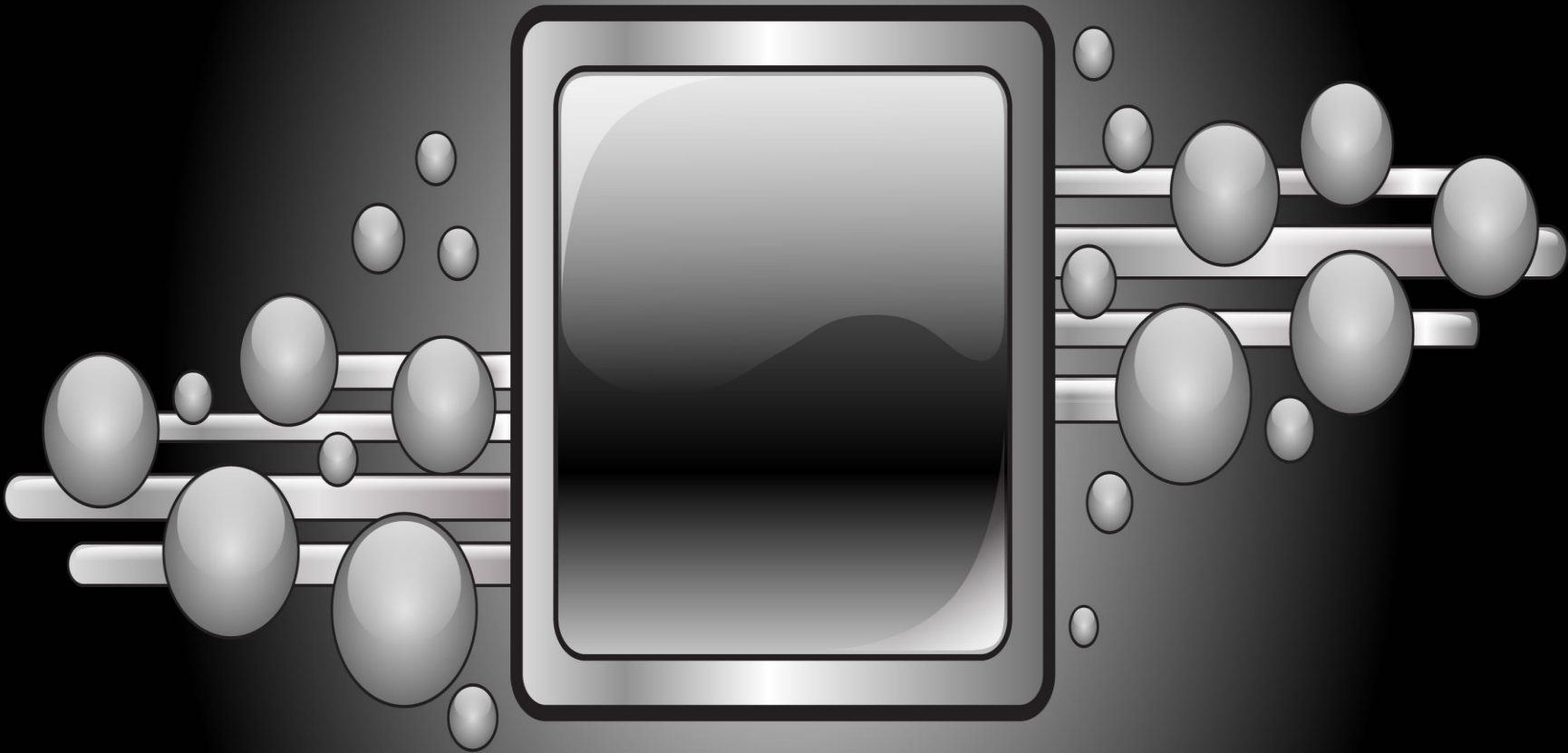


and ...

**Interaction**



and ...



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and ...





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# Position paper on Digital Storytelling



# Vision

Our position paper aims to provide a clear definition of digital storytelling for the creative and media industry and ***identify gaps and weaknesses*** in the story creation and consumption workflow. The paper should conclude with a ***roadmap*** towards a fully interoperable way forward for ***Immersive Media technology Experiences.***

# Table of contents

- Immersive narratives (AR/VR)
- Authoring tools
- Real time storytelling
- Storytelling for all
- Application examples – “making money”
- Content re-use, copyright and licensing
- The future
- Roadmap towards a fully interoperable way forward for Immersive Media technology Experiences.





**Those wanting to contribute will have to send me their Google id so I can share the document with you ([andrew@iet.ntnu.no](mailto:andrew@iet.ntnu.no))**