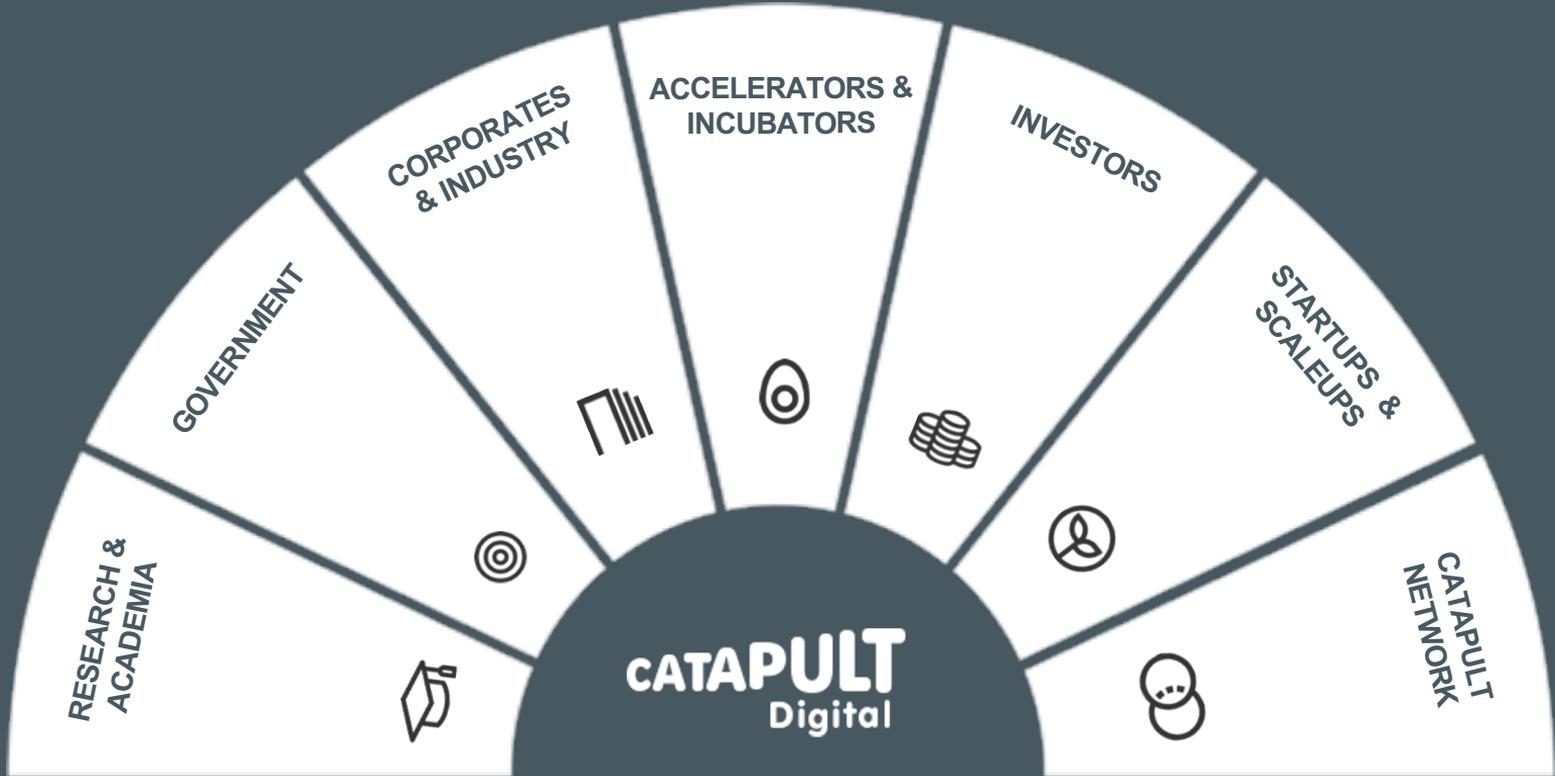

Digital Catapult:

Industry trends in AI, video and archive





1. Context for Digital Catapult
2. Industry trends & activities
3. Next generation applications in development
4. What we're doing





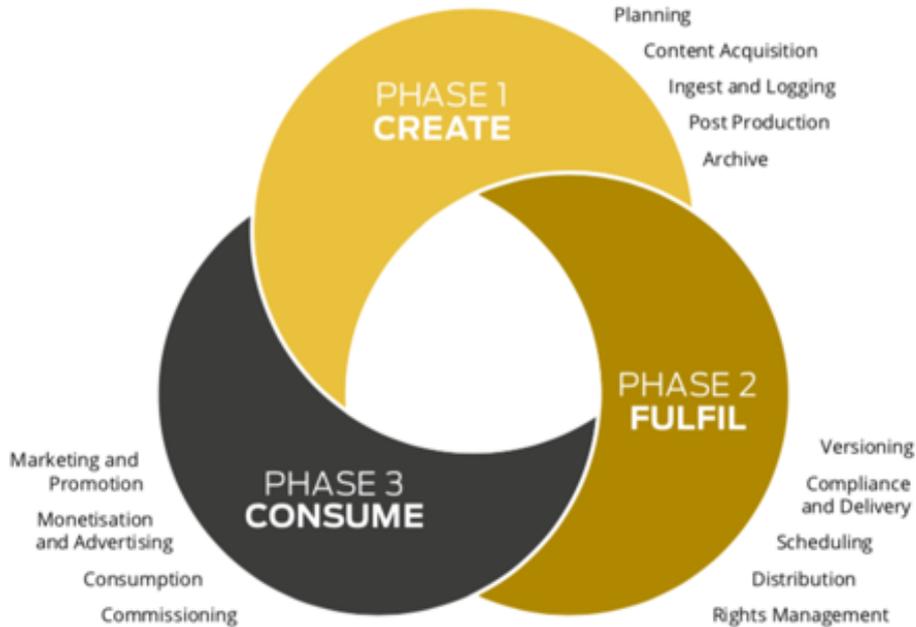
1. Funding model, impact & CR&D projects
2. Accelerators & Facilities
 - a. Machine Intelligence Garage
3. Creative industry focus



Why AI & archive?

- Two types of value driver for UK companies:
 - Cultural & arts institutions, museums, libraries: **sourcing content**
 - Heritage 2022
 - Natural History Museum (catalogue 1m species)
 - TV / broadcast / media owners: **sourcing content + production tools**
 - DPP report
- Impact for SMEs to access higher quality data

The Content Supply Chain



AI Opportunity & Maturity

Content supply chain stage

| Content supply chain stage | Total potential benefit score (maximum = 15) | Current maturity score (maximum = 5) |
|----------------------------|---|---|
| PHASE 1: CREATE | Planning | 2 |
| | Content Acquisition | 4 |
| | Ingest and Logging | 3 |
| | Post Production | 3 |
| | Archive | 3 |
| PHASE 2: FULFIL | Versioning | 4 |
| | Compliance and Delivery | 3 |
| | Scheduling | 3 |
| | Distribution | 4 |
| | Rights Management | 2/5 (linear) |
| | | |
| PHASE 3: CONSUME | Marketing and Promotion | 3 |
| | Monetisation and Advertising | 4 |
| | Consumption | 4 |
| | Commission | 2 |
| | | |

Source: DPP - Hometruths

Broadcasters, AI & Archive

- Data cleansing
- Face recognition
- Language translation
- Audio-to-text transcription
 - Used to “cheat”
- Voice recognition
- Quality control
- Object detection
- Intelligent search functionality
- Automated trailer creation

Barriers:

- Data readiness
- Difficulty of creative industries R&D
- IP & data sharing



Production tool example: BBC R&D

AI in live events

Trained on archive footage

Use case in Edinburgh Fringe

Won IBC R&D prize

Exploratory areas

- 2D to 3D, photogrammetry
- Virtual production
- Generative & adaptive content
 - Deepfake creation & recognition
 - Synthetic media
 - Text to video
- UGC vs PGC

All of these tools require higher quality training data... and big tech companies are hunting archives



Deepmind: Generative video creation



Synthesia: Thomson Reuters prototype



1. Digital Catapult & DPP Event April
2. Virtual production
3. CR&D - ideas welcome!