

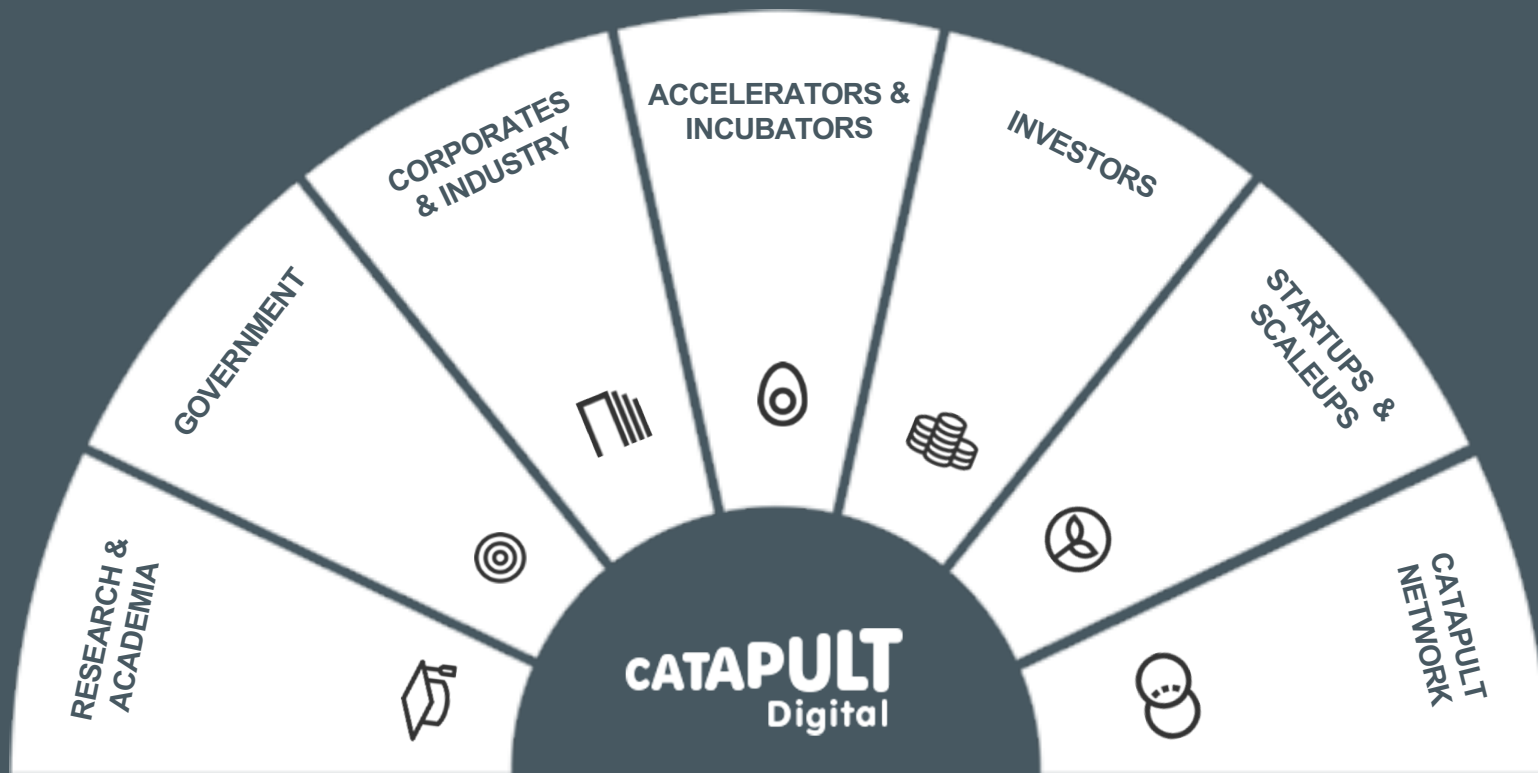


Digital Catapult:

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



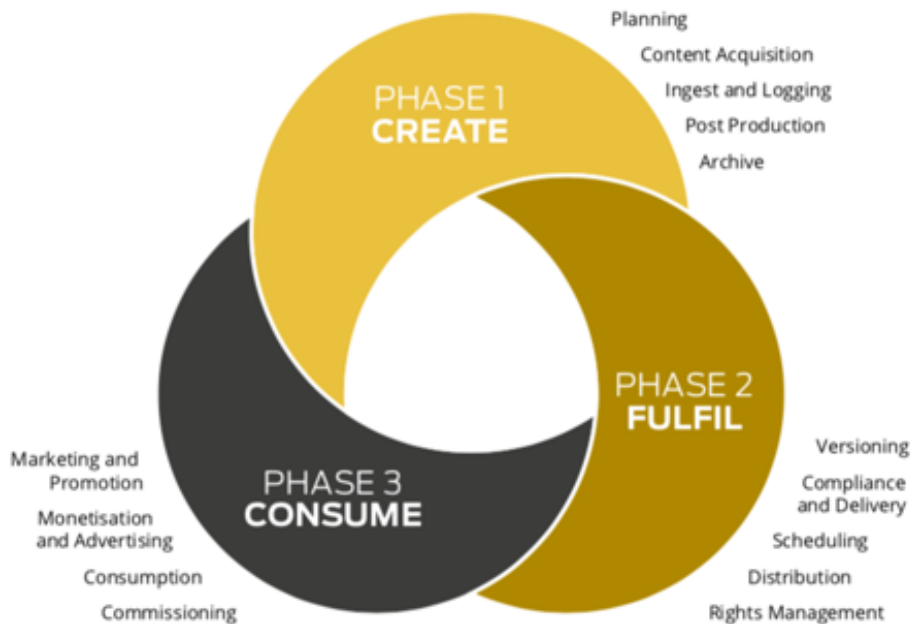
1. Funding model, impact & CR&D projects
2. Accelerators & Facilities
 - a. Machine Intelligence Garage
3. Creative industry focus



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	9	2
	Content Acquisition	10	4
	Ingest and Logging	8	3
	Post Production	11	3
	Archive	11	3
PHASE 2: FULFIL	Versioning	12	4
	Compliance and Delivery	9	3
	Scheduling	11	3
	Distribution	6	4
	Rights Management	12	2/5 (linear)
PHASE 3: CONSUME	Marketing and Promotion	11	3
	Monetisation and Advertising	11	4
	Consumption	11	4
	Commission	8	2

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!