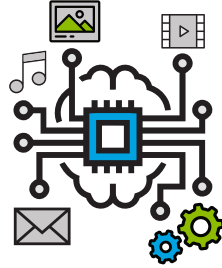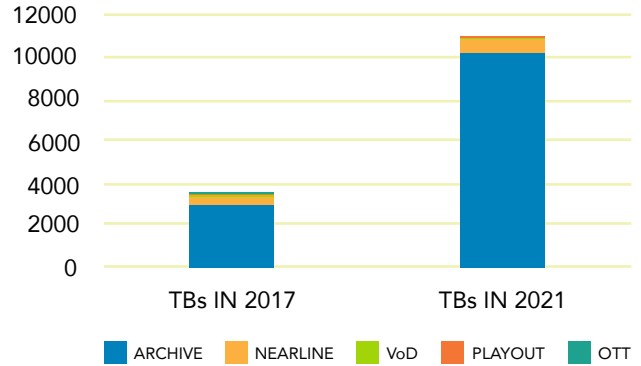## THE SITUATION

Today's video archives can be as large as 50PBs and have grown significantly with HD content. Tape storage is often considered inexpensive for slow-moving content but inefficient for fast-moving content.
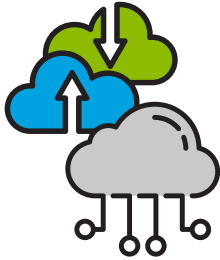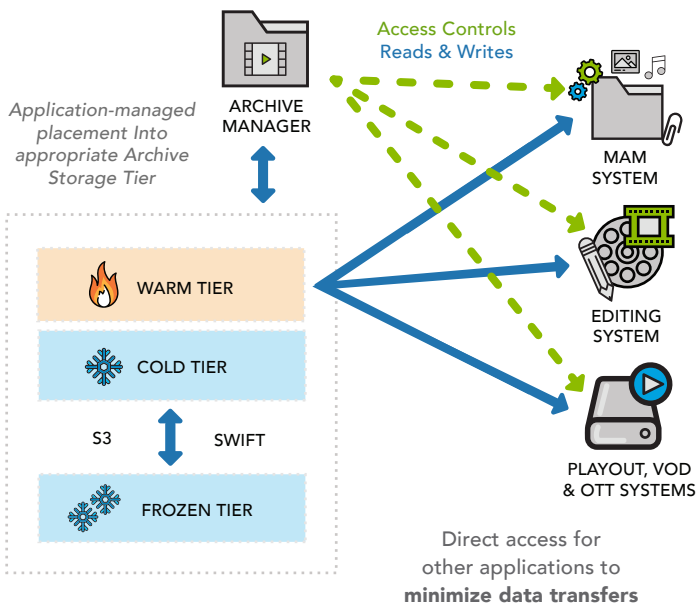
THE PROBLEM

The TCO of tape is higher than perceived, plus it limits content monetization. File systems don't scale well. Outsourcing valuable business assets to public cloud service providers can be a step too far for many.

BY 2021: 200% CONTENT LIBRARY GROWTH FOR MOST MEDIA COMPANIES. MOST GROWTH IN MONETIZABLE ARCHIVES.

TBs OF STORAGE - TYPICAL GROWTH SCENARIO (2017-2021)

Legend: ARCHIVE, NEARLINE, VoD, PLAYOUT, OTT

Source: Vecima primary research of broadcast market

THE SOLUTION

Highly scalable, software-defined storage leveraging object storage scale and COTS-hardware efficiency.

• Host in a private cloud for lowest TCO.
• Avoid "cache layers" to minimize operational complexity.
• Monetize by easy search and retrieval.

Application-managed placement Into appropriate Archive Storage Tier

ARCHIVE MANAGER

Access Controls
Reads & Writes

WARM TIER
COLD TIER
S3 — SWIFT
FROZEN TIER

MAM SYSTEM
EDITING SYSTEM
PLAYOUT, VOD & OTT SYSTEMS

Direct access for other applications to **minimize data transfers**

ROI

3 year TCO of Private Cloud is lower than alternatives, plus there are added benefits:

TCO Cost Category	Private Cloud	Tape	Public Cloud
Storage Capacity	$	$	$
Storage Access Charge			$
Cache Layer *(to minimize tape access)*		$	
Operational Management Costs	$	$	$
Facilities Costs *(Cooling, etc.)*	$	$	
Manual Maintenance Costs		$	
Mass Data Extraction/Deletion Costs		$	$
Data Migration Services for Hardware Upgrade	$		
Outage Risk in Operational Environment	Low	Med/High	Low
3 YEAR TCO	**0.9x**	**1.0x**	**1.4x**
+ Monetization Ability	High	Low	High
+ Long-Term Scalability	High	Low	High
+ Content Quality Assurance	High	Medium	High

Source: AWS; EMC; Vecima customer research

LOST REVENUES & WASTED INVESTMENT

"We lose 1 year's worth of content each year through tape deterioration"
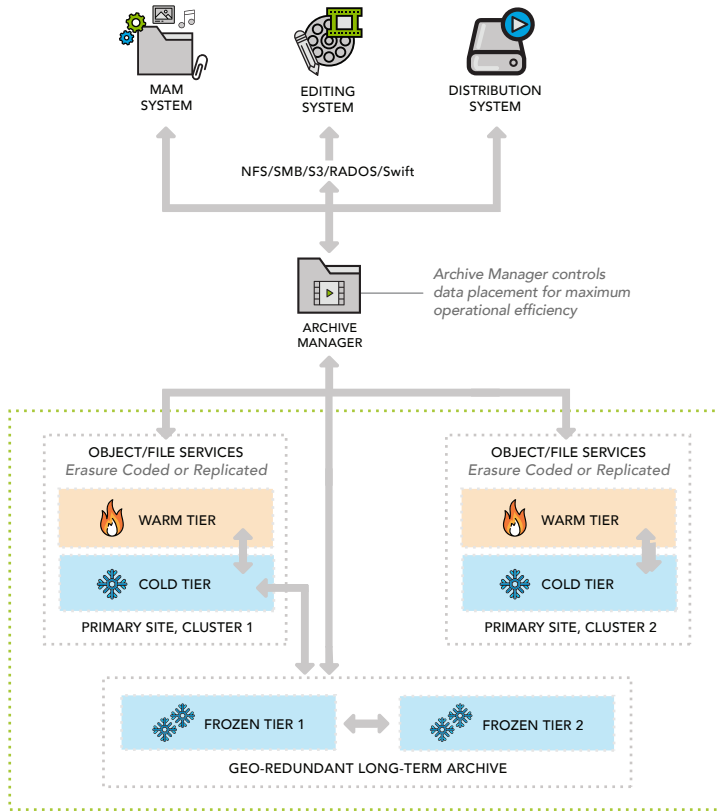– US Broadcaster

"Estimated to be 1 billion useful videos in unused archives"
– leading Archive Solution Supplier

"50% of all feature films produced before 1950 have been lost"
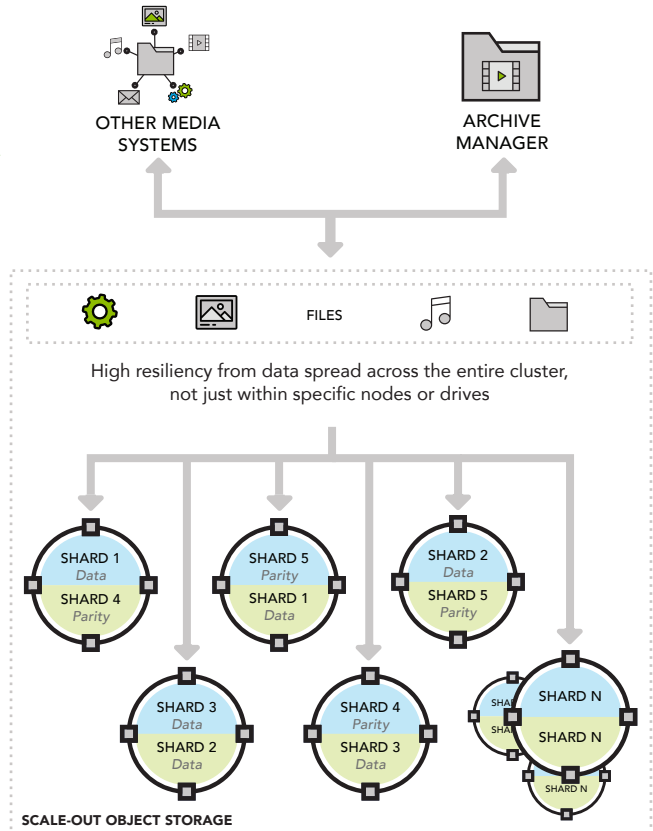– US Library of Congress

ARCHIVE STORAGE *Solution Brief*

VECIMA CAN HELP

- **Efficiency**: easy in-service hardware and software upgrades
- **Cost-effectiveness**: scale incrementally & quickly
- **Value**: expand to exabytes without an array migration
- **Ease of use**: a single evergreen platform with one UI
- **Flexibility**: support legacy & next-gen applications
- **Security**: fully protected data at all times
- **Peace of mind**: proven software from video business experts

MAM SYSTEM · EDITING SYSTEM · DISTRIBUTION SYSTEM

NFS/SMB/S3/RADOS/Swift

ARCHIVE MANAGER

Archive Manager controls data placement for maximum operational efficiency

OBJECT/FILE SERVICES *Erasure Coded or Replicated*

WARM TIER · COLD TIER

PRIMARY SITE, CLUSTER 1 · PRIMARY SITE, CLUSTER 2

FROZEN TIER 1 ⟷ FROZEN TIER 2

GEO-REDUNDANT LONG-TERM ARCHIVE

MediaScaleX // Storage™

WHY OBJECT STORAGE IS BEST FOR ARCHIVES

OTHER MEDIA SYSTEMS · ARCHIVE MANAGER

FILES

High resiliency from data spread across the entire cluster, not just within specific nodes or drives

SHARD 1 Data / SHARD 4 Parity · SHARD 5 Parity / SHARD 1 Data · SHARD 2 Data / SHARD 5 Parity

SHARD 3 Data / SHARD 2 Data · SHARD 4 Parity / SHARD 3 Data · SHARD N / SHARD N

SCALE-OUT OBJECT STORAGE

Maximum Protection
Resilience at object, disk and server level
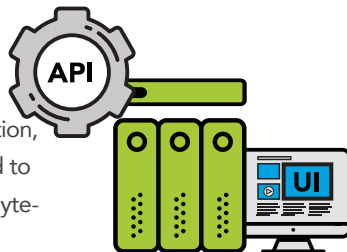
Maximum Flexibility
High performance when optimized for video

Maximum Scalability
Add nodes as required to reach exabyte+ scale

VECIMA KNOWS STORAGE

Vecima has two decades of media storage experience and now leads the industry in responding to the trends in media content growth. MediaScaleX // Storage™ is a best-in-class, modern, object storage solution, optimized for video applications and designed to support the media industry transition to petabyte-level, multi-workload, mission-critical video applications.

THE BOTTOM LINE

Vecima can simplify your storage infrastructure by architecting, building and maintaining a multi-workload storage solution that supports your content storage needs today and in the future.

VECIMA

STORE · PROTECT · TRANSFORM · DELIVER