



IMAGE MANAGER

Image & Video Optimization



Evolution of Websites

SONY

SONY Welcome to S

- electronics
- computing
- wireless
- media
- professional
- semiconductors

I'm searching for...

special features:
Sony VAIO Direct | Imag on photo

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1998 – Text

SONY

+Register +Shop +Electronics +PlayStation +Online Games +Music & Movies

Welcome to the World of Sony
Music. Movies. TV. Games. Electronics.

Signature COLLECTION

See Hear Play

- Passion. Ambition. Butler. Find the recipe for success in Julie & Julia 8/7
- Catch Drop Dead Diva Sundays at 8 p.m.
- Enter the Ugly Truth sweepstakes for a chance to win
- Watch Seinfeld weekdays for a chance to win a \$2,500 shopping spree
- Swing with the Spectacular Spider-man on DVD
- Tune into Teen Tournament week on JEOPARDY!

Enjoy pure pop perfection from American Idol Jordin Sparks

Don't leave town without Daughtry

Enjoy a BLACKsummers' night with Maxwell

His music will live forever

Rock with Elvis in Memphis

Discover the new touch screen X series Walkman® video MP3 players

Introducing mightiest PS

Prepare your new war: M

Start your e track: Gran

Cruise the e Clanki® Fut

Rock out with Montana Lin

Apply Now Special Offer PlayStation

SHOP THE SONY STORE GAMING

Madden 25
Immerse yourself in the latest Madden NFL experience.

The Wolf Among Us
Episode 2: Smoke & Mirrors Now Available.

MAKING ACID™ product

Index of Sites | FAQ | Terms/Privacy | Investor Relations | Corporate Information
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2009 – Text + Images

SONY Electronics PlayStation Entertainment

THE AMAZING SPIDER-MAN MAY 2
WATCH THE TRAILER

SHOP THE SONY STORE GAMING

FULL FRAME, NO COMPROMISE
The award-winning a7, world's lightest full-frame interchangeable lens camera.

SHOP NOW

Madden 25
Immerse yourself in the latest Madden NFL experience.

The Wolf Among Us
Episode 2: Smoke & Mirrors Now Available.

MAKING ACID™ product

2014 – Rich Imagery

SONY Electronics PlayStation Entertainment Support

Sign In Search Sony Sony Sites

Let's Find Out Which Spider-Man Star Is the Most Responsible

"SPIDER-MAN™: FAR FROM HOME" PREMIERES THIS WEEK

Use Two Apps at Once for Improved Multi-Tasking

LEARN ABOUT THE XPERIA 10 PLUS

Everything you know about Jumanji is about to change... Watch the trailer for JUMANJI: The Next Level now and see it in theaters this Christmas! pic.twitter.com/IKserUBdbM

1 day ago

Swing Into Action With New "Far From Home" Suits

PLAY "MARVEL'S SPIDER-MAN" ON PS4™

The Mysterious Charles Townsend Is Expanding His Agency With the Next Generation of "Charlie's Angels"

COMING TO THEATERS THIS NOVEMBER

2019 – Rich Images & Videos

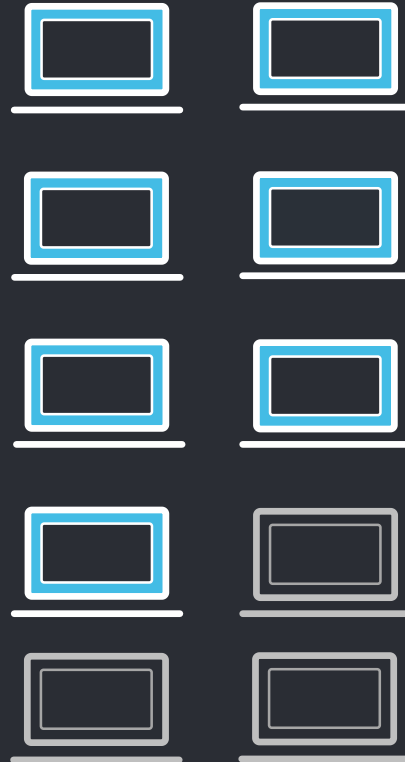
Market Reality

The Overweight Web

OVER ONE YEAR

70%

of websites got larger*



Average page weight from images

63%



Video mobile data growth by 2022

79% +



Low quality images and videos a reason not to buy

#3 reason**



*HTTPArchive via @katiehempenius. Alexa Top 10K Sites July '17 - '18

** 2018 eMarketer, "Online Shoppers' Expectations for Visual Merchandising Rise Dramatically"

New Reality is Complex

Delivering Quality without Compromise

Page weight and Performance



- High demand for images and videos that boost engagement & UX
- Rich **digital assets are heavy** and can impact performance

Diversity in devices, browsers, and OS



- **Many derivative versions** needed for each asset
- Must consider device, OS, and browser-specific formats (JPEG 2000, JPEG XR, WebP, WebM/V9, H.265, etc.)
- Artistic transformations may be needed
- Too many assets to create, store, and manage

Logic to deliver the optimal size, format, & resolution



- **Complex code** to determine when to deliver the right rendition to each and every end user

Many Challenges, Single Solution

Image Manager

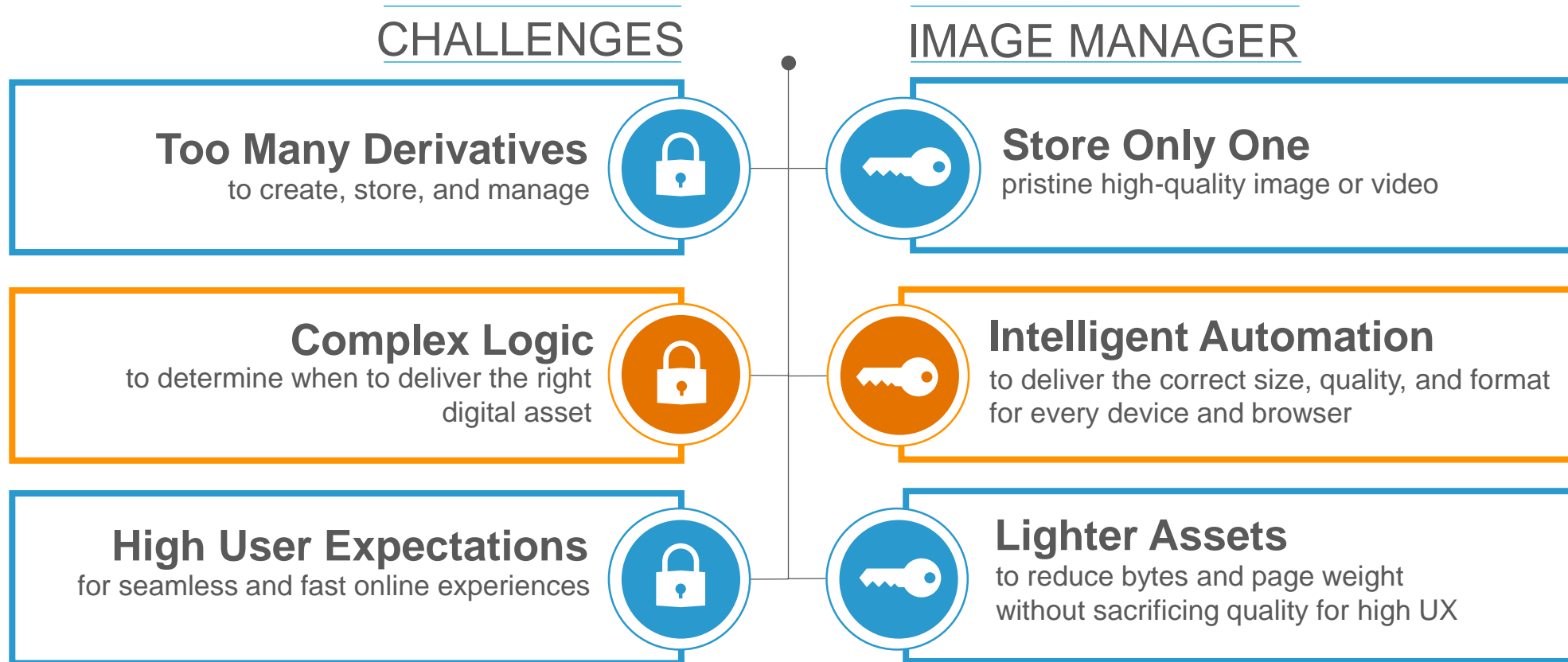
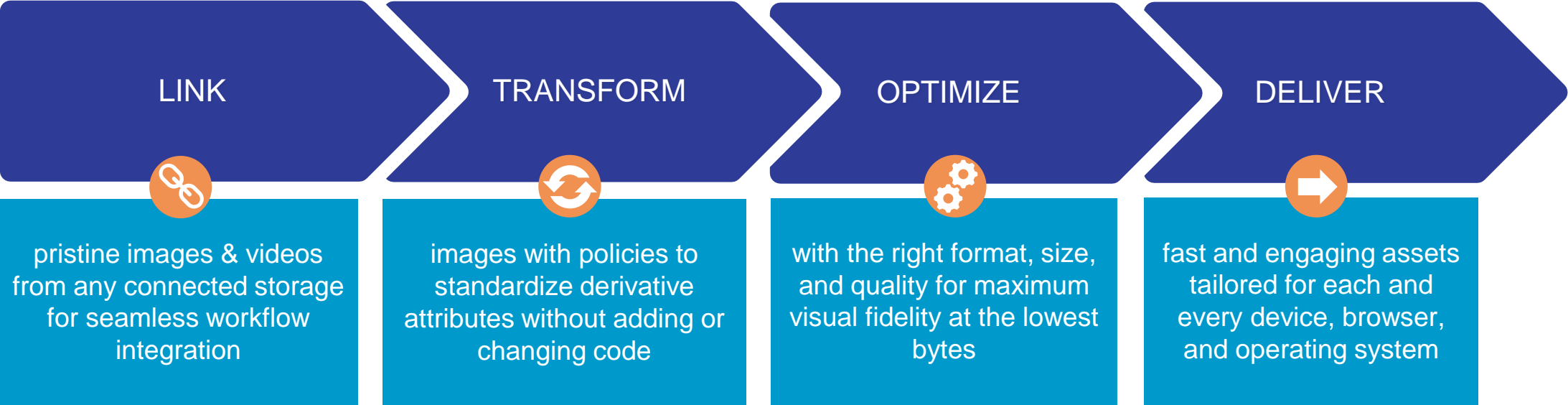


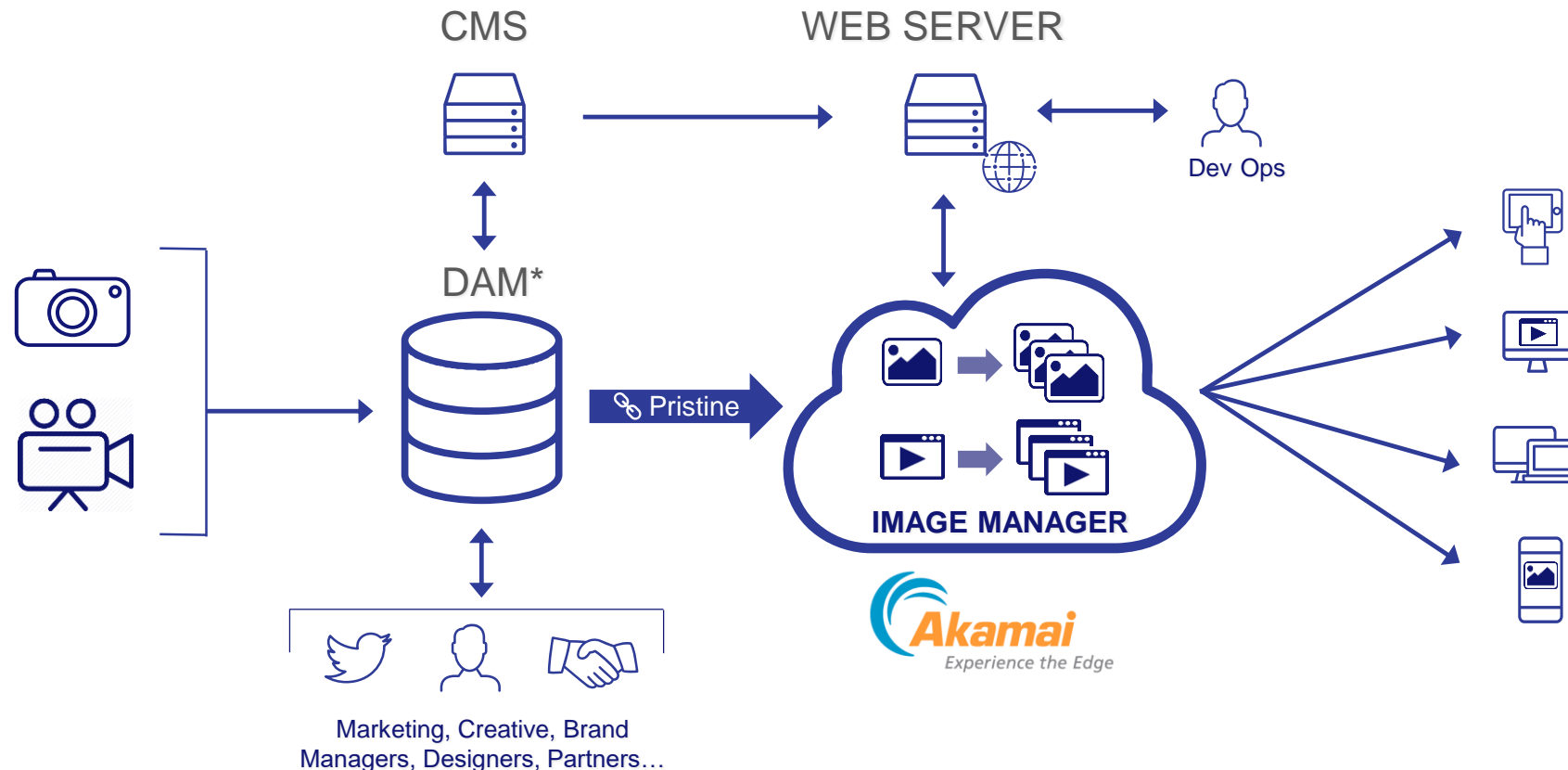
Image Manager Workflow

Automated Optimizations · Efficient Workflows · Faster Time-to-Market · Reduced Costs



1. Link pristine assets

Seamless Integration into Existing Workflows



***Digital Asset Management** = Interface for asset creation, management, and storage

Link pristine assets from any web-accessible storage location.

Image Manager is compatible with existing publishing workflows to give full control over digital assets and infrastructure decisions.

2. Transform

Artistic and visual control with minimal effort



Customizable policies

Dynamic transformations via policy variables

Video policies to adjust quality and resolution

Easy-to-use Policy Manager & APIs

Artistic transformations (images only)

- Background color
- Facial recognition auto crop
- Region-of-interest crop
- Grayscale
- Watermark
- Scale, rotate, trim, crop, and more

3. Optimize Images and Videos

Three levers for optimal quality & delivery

Optimal Quality

Maximize image byte reduction that is imperceptible to the human eye with perceptual quality algorithms



Pristine

1.8 MB



Optimized

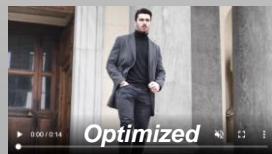
76.3 KB

Optimize video and audio streams with preferred quality settings



Pristine

Pristine
9.4 MB



Optimized

Medium
4.8 MB

Best Format

Automatically deliver derivative images and videos at the Edge with the correct format based on the end users' device & browser

Image Format	Size vs JPEG	Browser/OS Support
JPEG	N/A	All
WebP	-35%	
JPEG XR	-30%	
JPEG 2000	-30%	

Video Format	Bitrate vs MP4 (H.264)	Browser/OS Support
MP4 (H.264)	N/A	All
MP4 (H.265)	-50%	
WebM (V9)	-50%	

Resolution & Size

Automatically deliver images and videos based on the device and screen size to prevent downsampling (or over-downloading of unnecessary bytes)



DERIVATIVE IMAGE WIDTHS

320, 640, 1024, 2048, and 5000

DERIVATIVE VIDEO RESOLUTIONS

853x640, 1280x720, 1920x1080

4. Deliver at the Edge

Rich Interactive Experiences at the Scale of Akamai

Enhanced caching architecture

- Full access to delivery controls (e.g., TTL, purge, etc.)
- Derivative assets closest to end users

Mobile Ready

- Auto-resize based on viewport width
- Prevent over-downloading bytes

Interactive Media Viewer

- Zoom, 360° view, and video enabled
- Responsive (mobile-aware)

Dashboard

- Gain insight into assets delivered, byte reduction, content type, and more



Key Benefits

Empowering both Business *and* Operational stakeholders

Business Benefits

- Automatically create, modify, and publish derivative assets for **faster time-to-market**
- Provide **consistent user experiences** across a variety of devices and networks
- Reduce image and video weight for **lighter and faster pages**
- Align to **mobile and responsive web design** strategies
- **Reduce the cost** to store thousands of derivative assets

Operational Efficiencies

- **Eliminate manual processes** with intelligent workflow automation
- **Easily integrate** without the need for code changes or asset migration/upload
- Flexibility to create **custom policies** via Policy Manager UI or query string parameters
- Automatically optimize assets with the **highest visual fidelity** at the **lowest bytes**

Questions?

