





Agenda

- The Problem Statement
- Dolby Vision: Solution Overview
- Dolby Vision: Workflow and Technology

PSS Turkey – Dec 2014

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The Problem Statement

The Next Generation Visual Experience

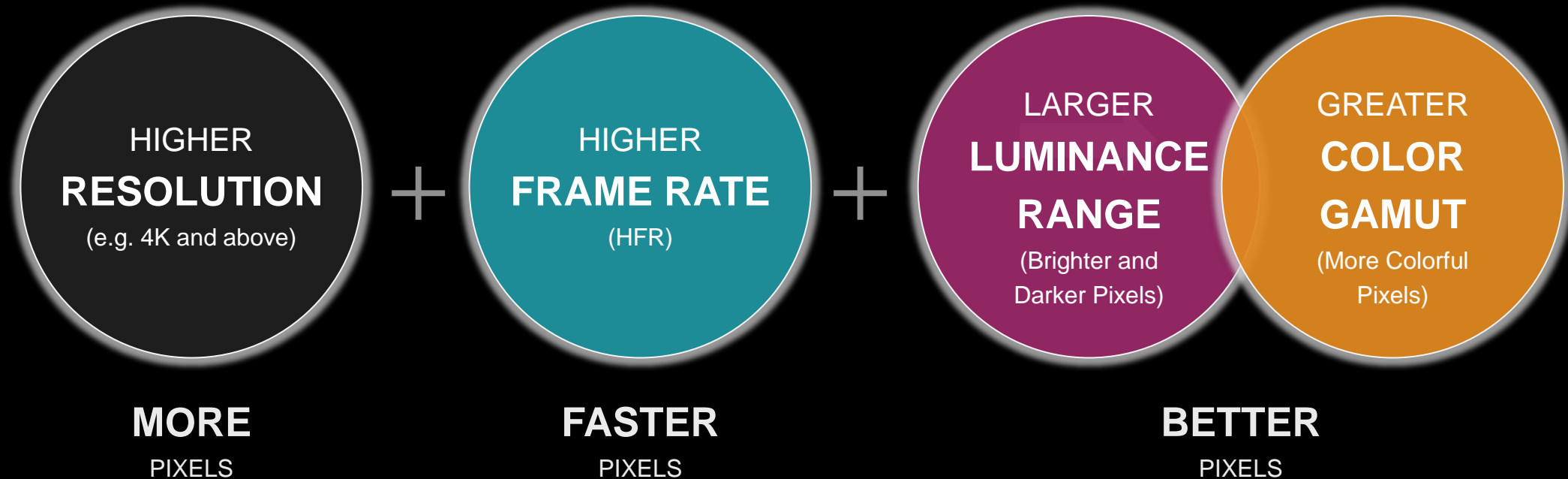
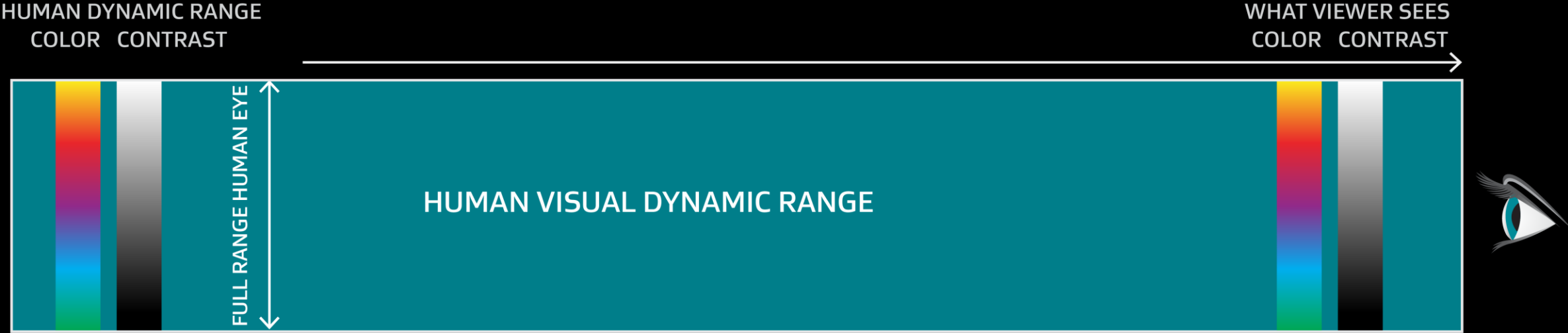
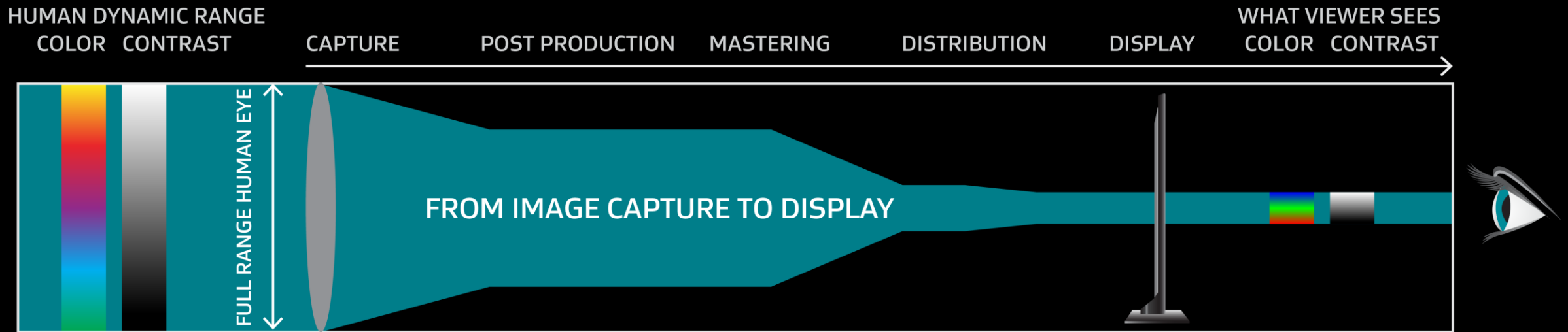


Image Delivery to the Human Eye



Content Delivery in today's Entertainment Ecosystem





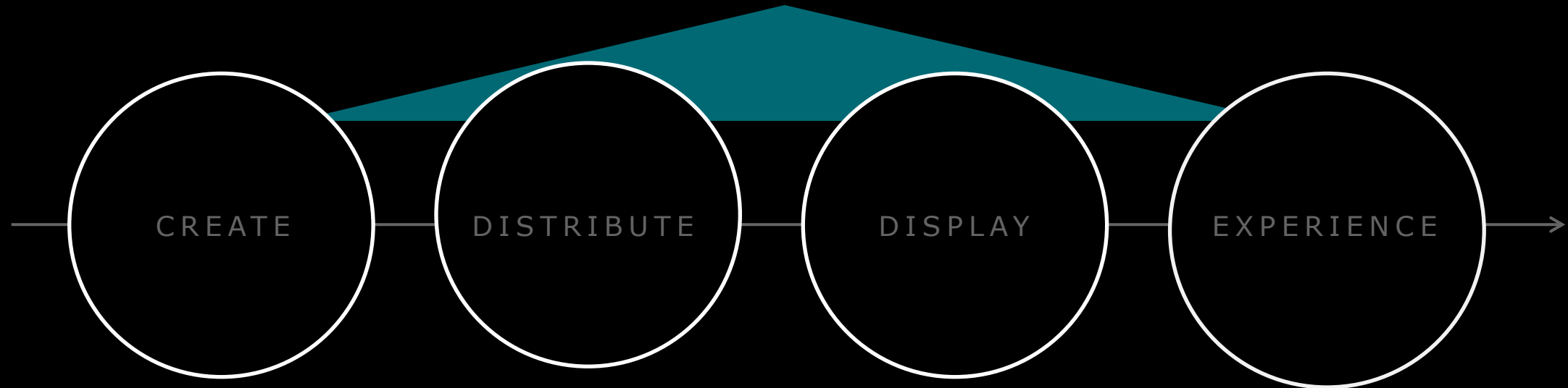
Dolby Vision : Solution Overview

Dolby Vision Builds Value through the Entire Ecosystem



Key Drivers of Ecosystem Momentum

Cinema exposure drives demand for Dolby Vision experiences in the home
Organic development of Dolby Vision demand in the home as consumers experience displays at retail, and as industry and CE buzz builds



Value Delivered

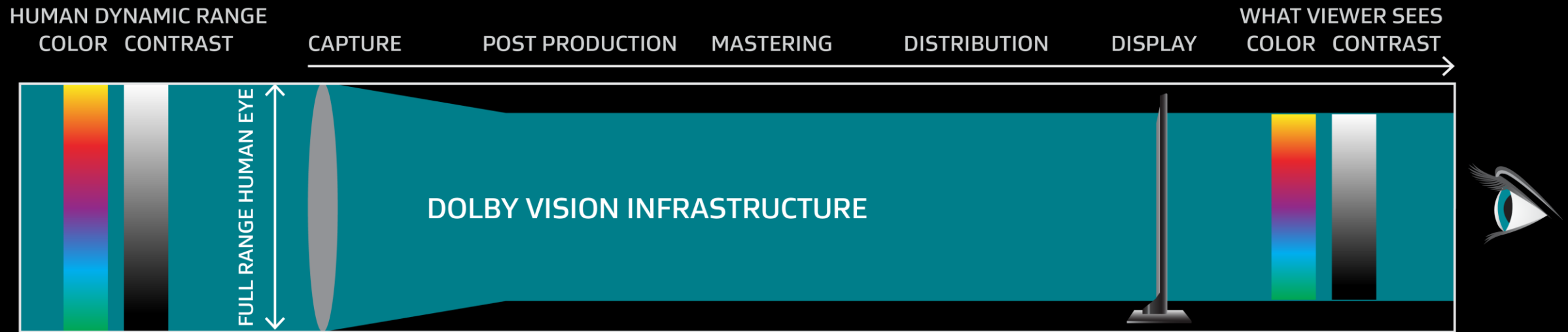
Tools that enable better storytelling and more creative freedom, production of more compelling and in-demand content

Differentiated content to garner premium price points and subscriber preference

Competitive advantage to drive market share and revenue growth

Dramatically different, and markedly better entertainment experiences

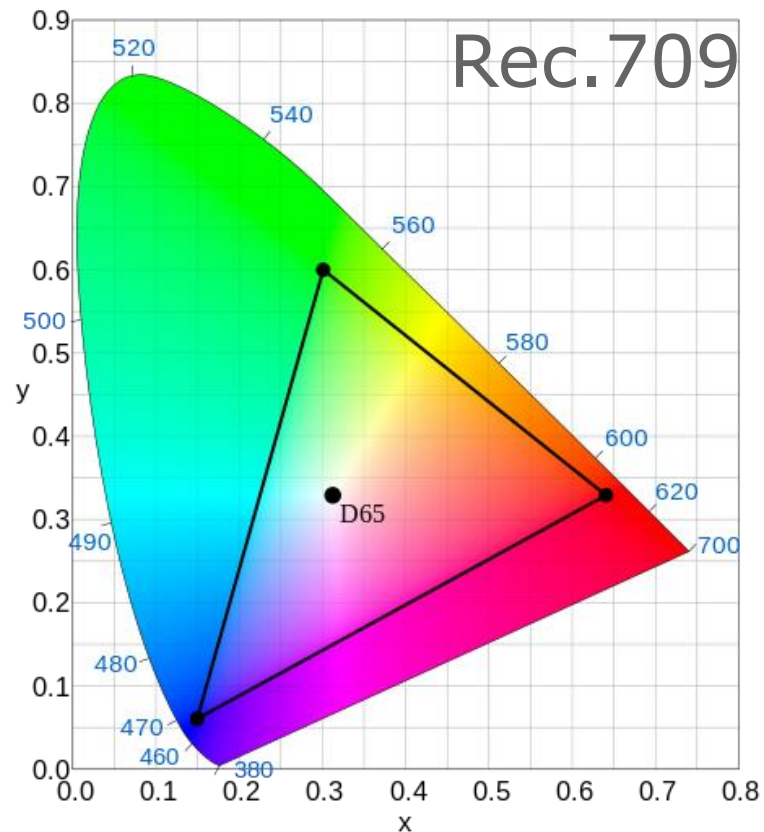
Dolby Vision Delivery in the Entertainment Ecosystem



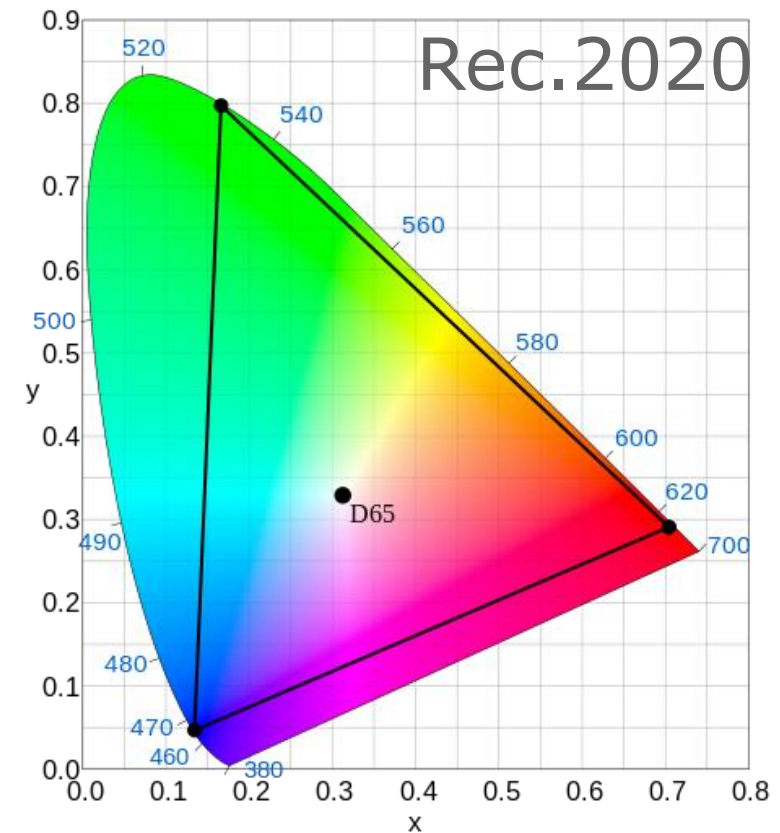
Wider Color Gamut



- Current Consumer Video Content



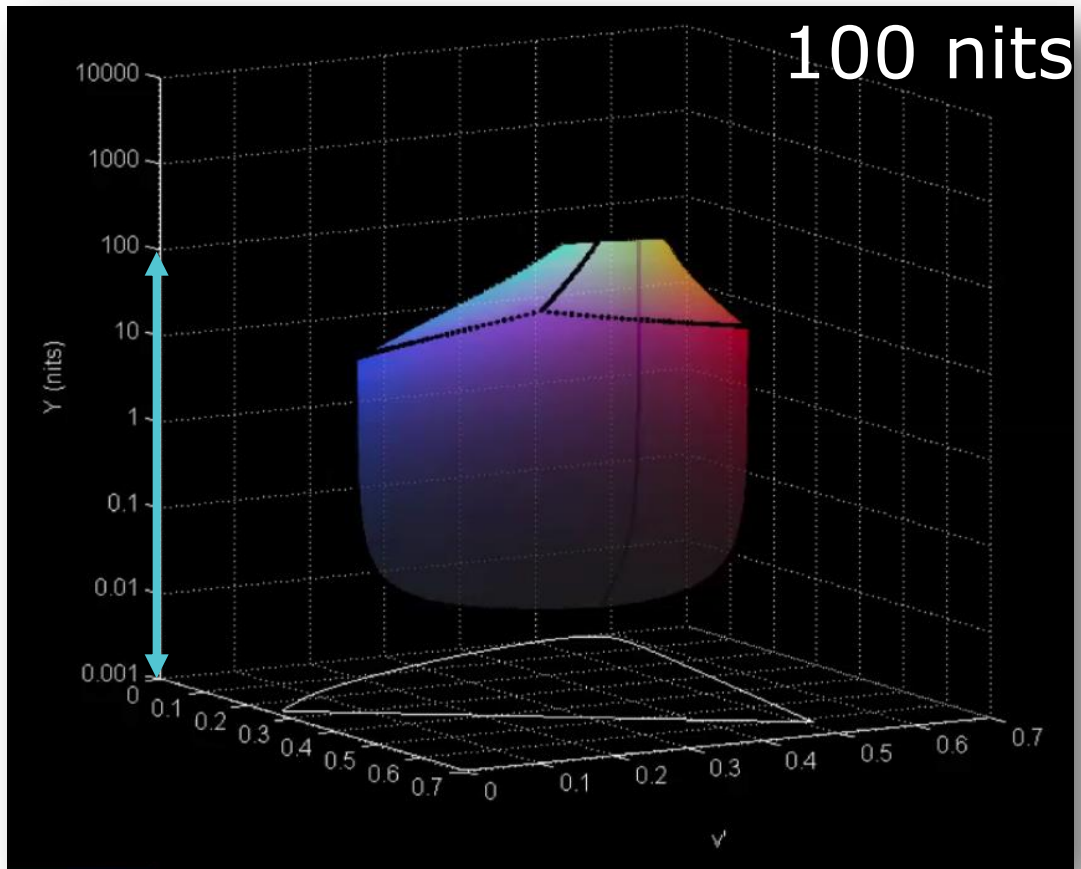
- Dolby Vision Video Content (Rec 2020 as an example)



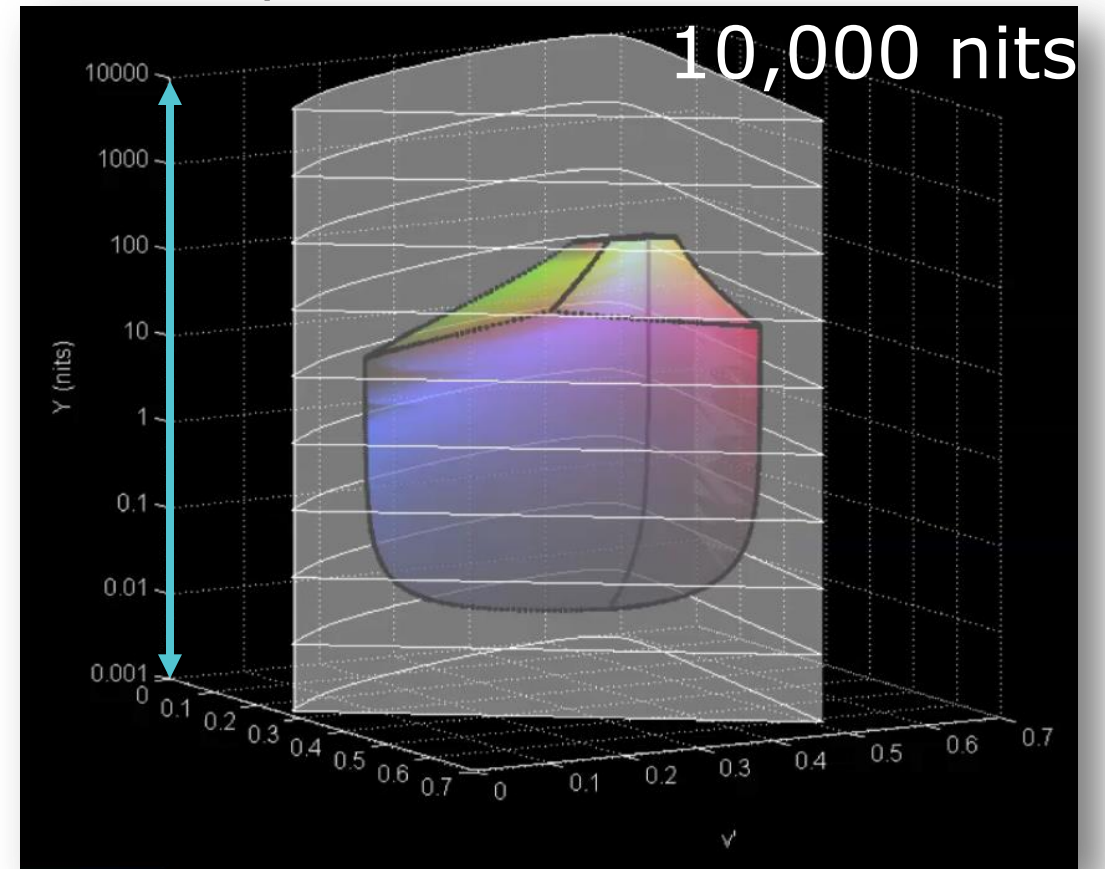
Higher Dynamic Range – Color Volume



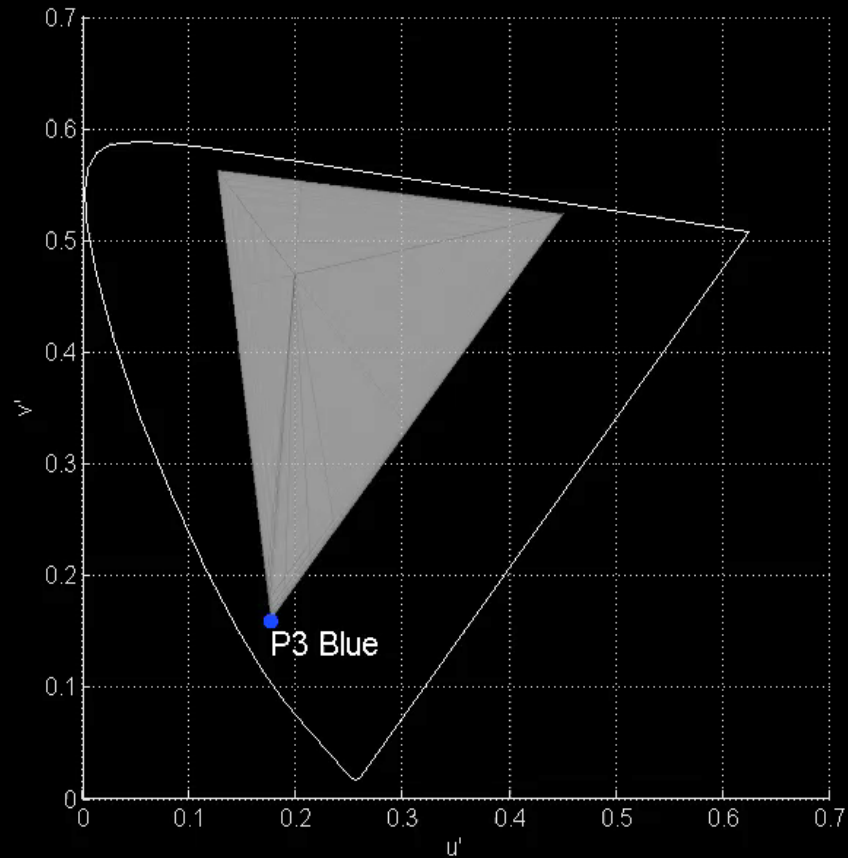
- Current Consumer Video Content



- Dolby Vision Video Content



Distinction between color gamut area and color volume

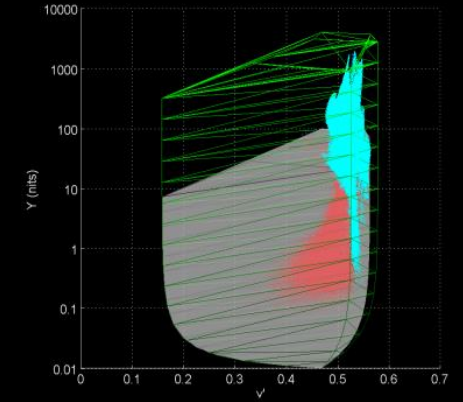
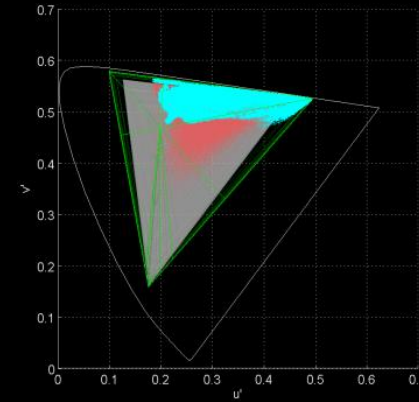
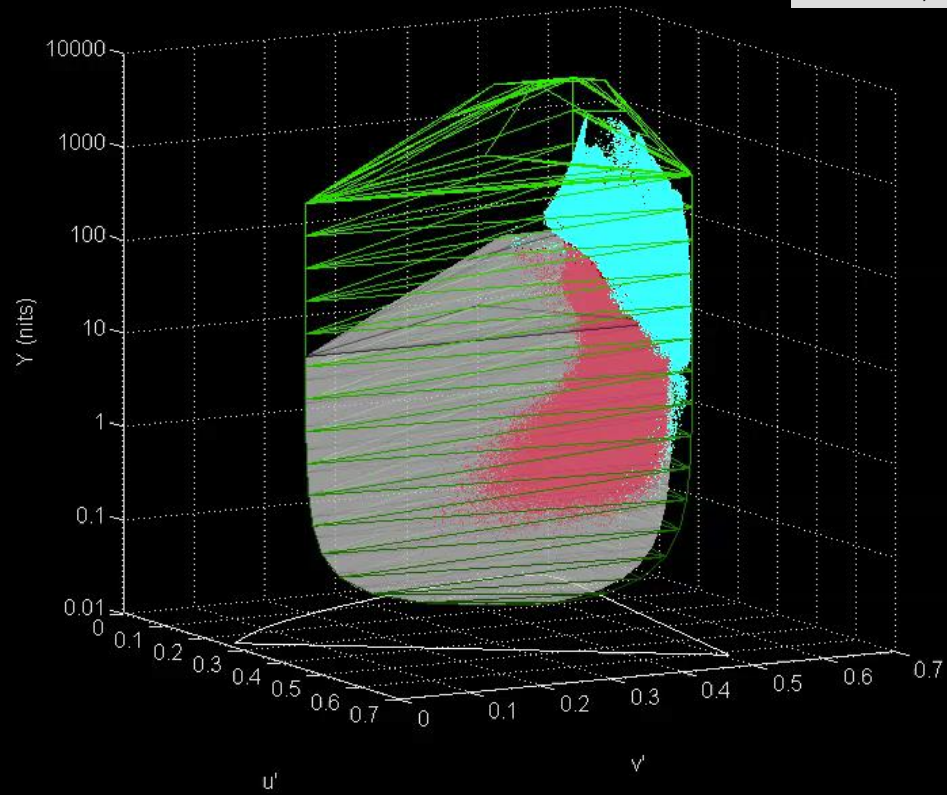


- When comparing color gamuts, the brightness (intensity) is often neglected
- To describe how a color appears to a human (color appearance), need both color and its intensity
- Use the range of colors and intensities to describe a color volume
 - The palette of all available colors to render artistic intent
- Need a very bright white in order to get a bright color!
 - P3 blue is only 7nits with 100nit white
 - ...36nits with 500nit white
 - ...722nits with 10Knit white

Flowers



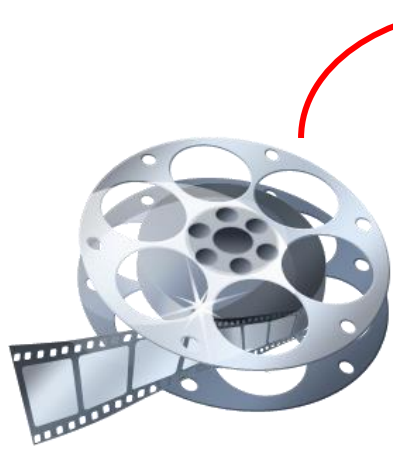
In Gamut Pixels
Out of Gamut Pixels
Rec.709, 100nits



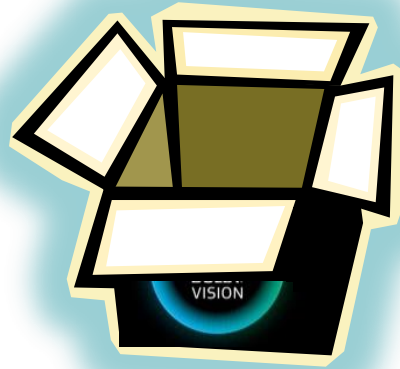
Legacy Content Ecosystem



Dolby Vision Content Ecosystem



Enables creatives
to fill the larger
box



Rec.2020, 10,000nits

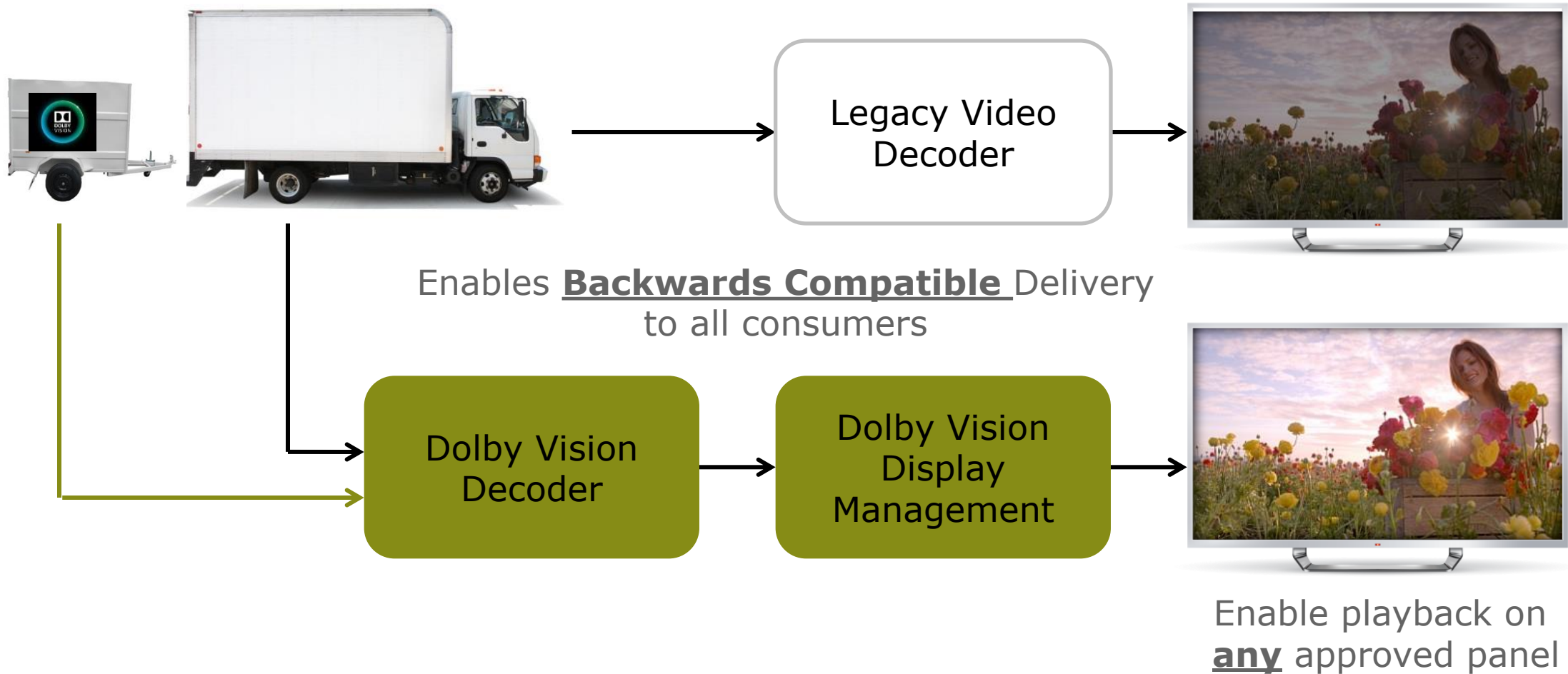


Enables efficient delivery
to consumers



Enables consumer
playback

Dolby Vision Playback Components



The End Result



Dolby Vision supported picture quality will significantly out perform Non-Dolby Vision devices when receiving Dolby Vision content

Non-Dolby Vision Consumer Experience



**Non-Dolby
Vision
Playback
Device**

Dolby Vision Consumer Experience



**Dolby Vision
Playback
Device**

**Dolby
Vision
Signal**



**Dolby
Vision
Signal**



Dolby Vision : Workflow and Technology

What is Dolby Vision?



- Enabling the end-to-end ecosystem for richer video content.
- More dynamic range and wider color gamut.

CONTENT CREATION OWNERS | STUDIOS | NETWORKS



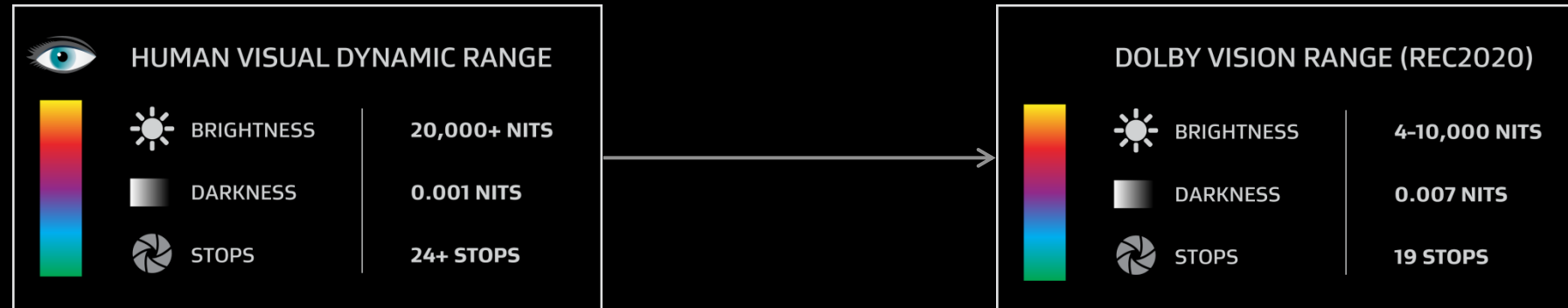
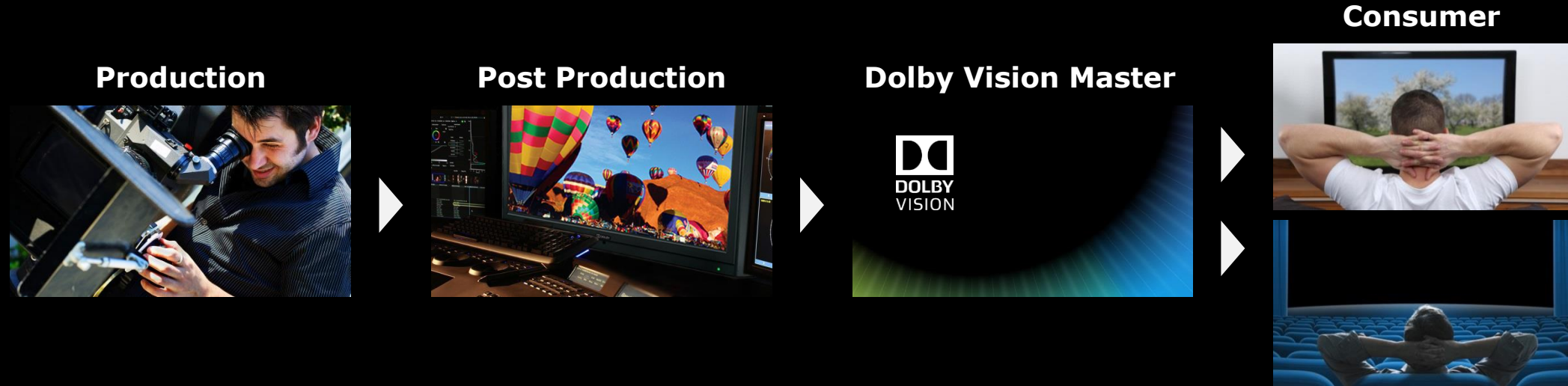
DISTRIBUTION ONLINE SERVICES | PAY TV PACKAGED MEDIA



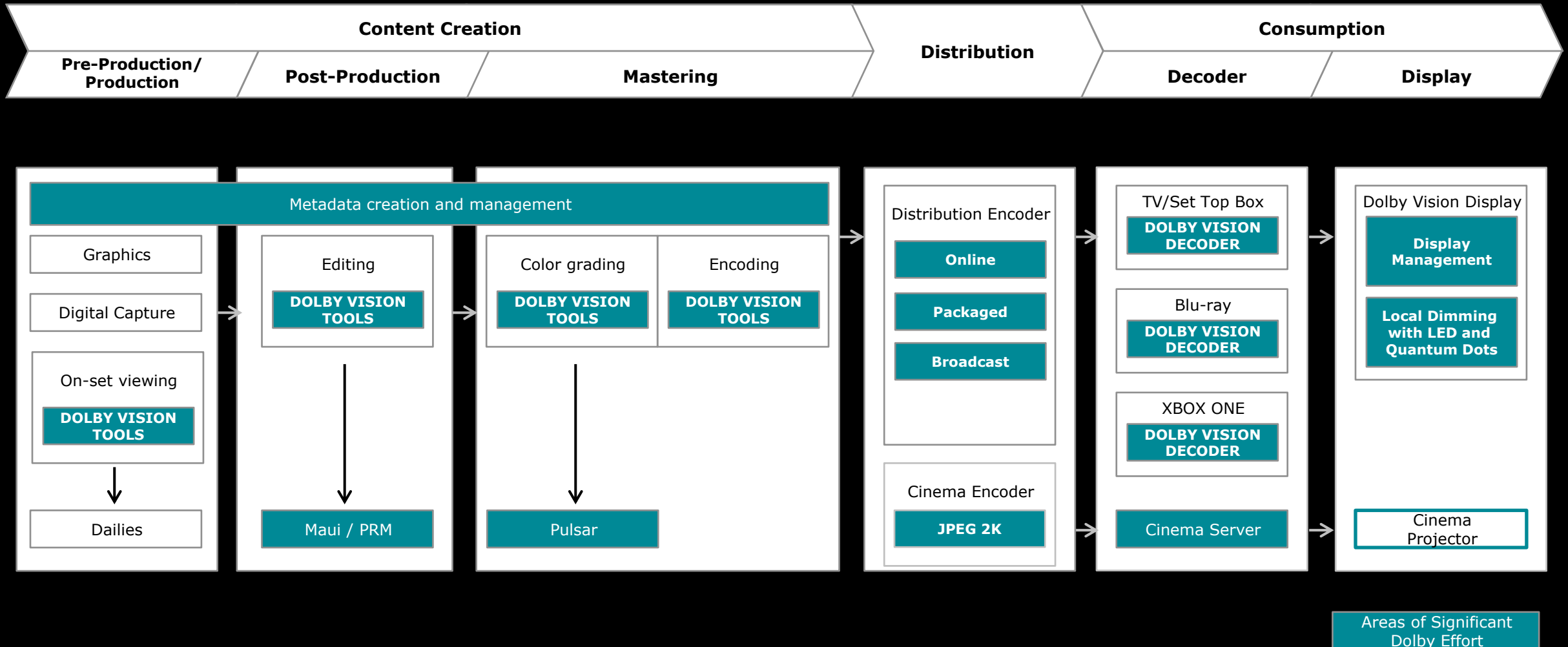
PLAYBACK ON ANY DEVICE



Dolby Vision Content Creation Methodology



EDR Content Workflow – Non-Live

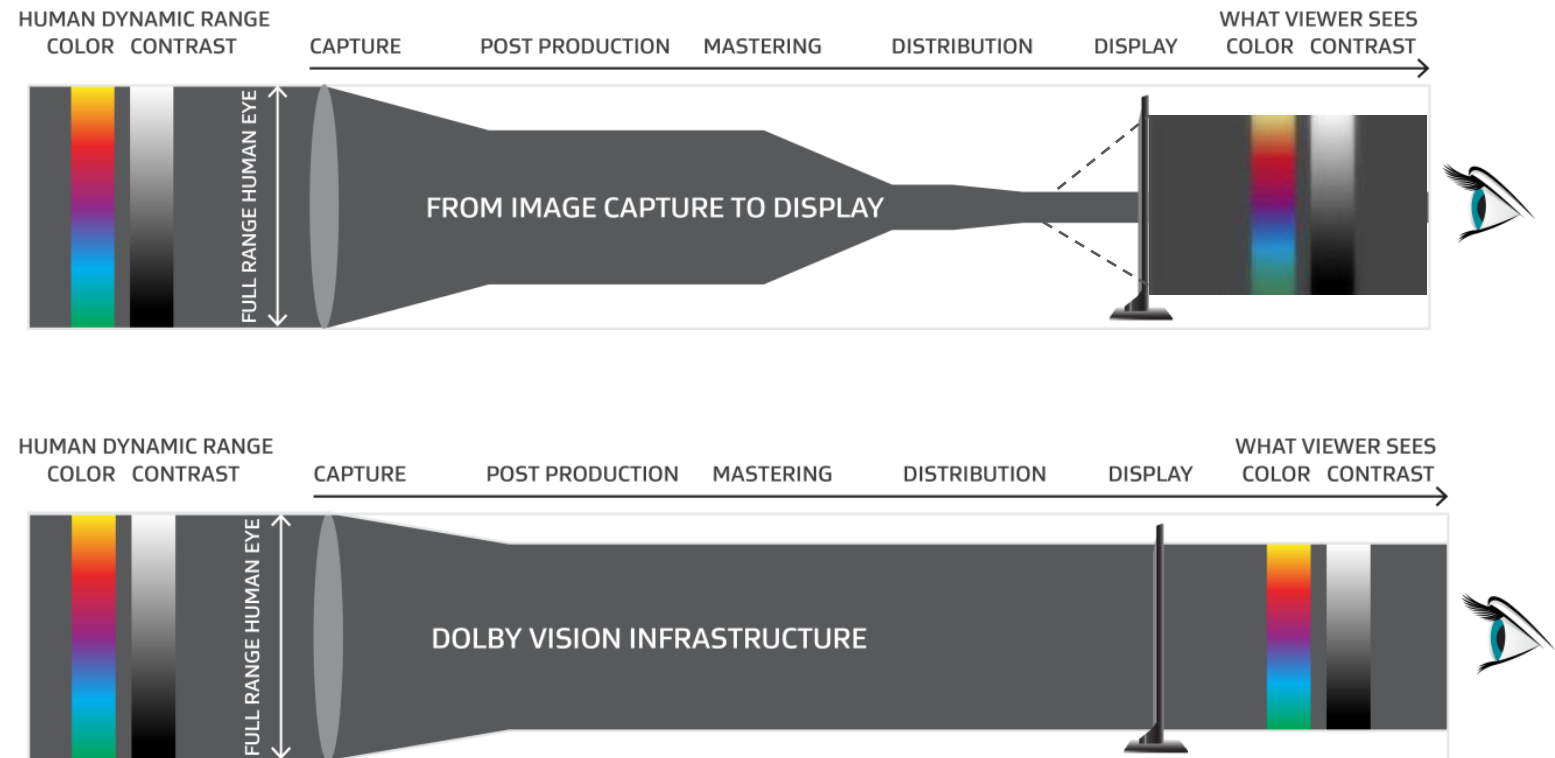


Key Aspects of Dolby Vision

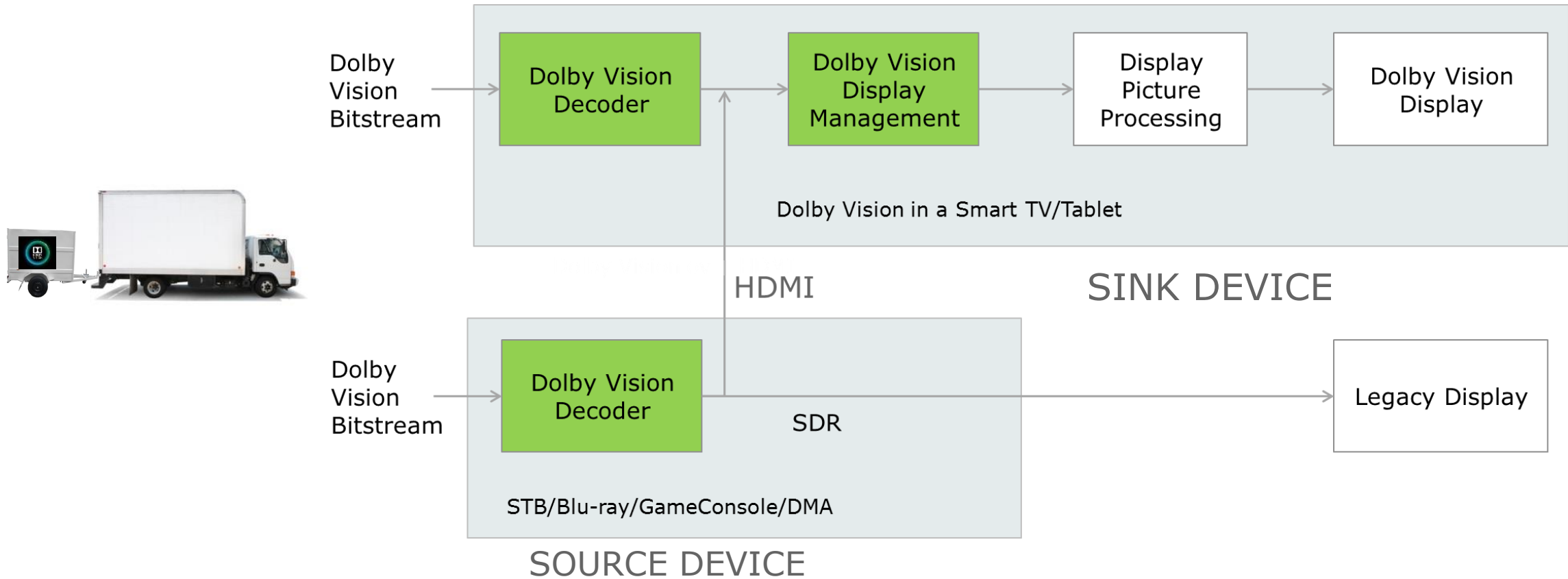


Creation and delivery of richer video content

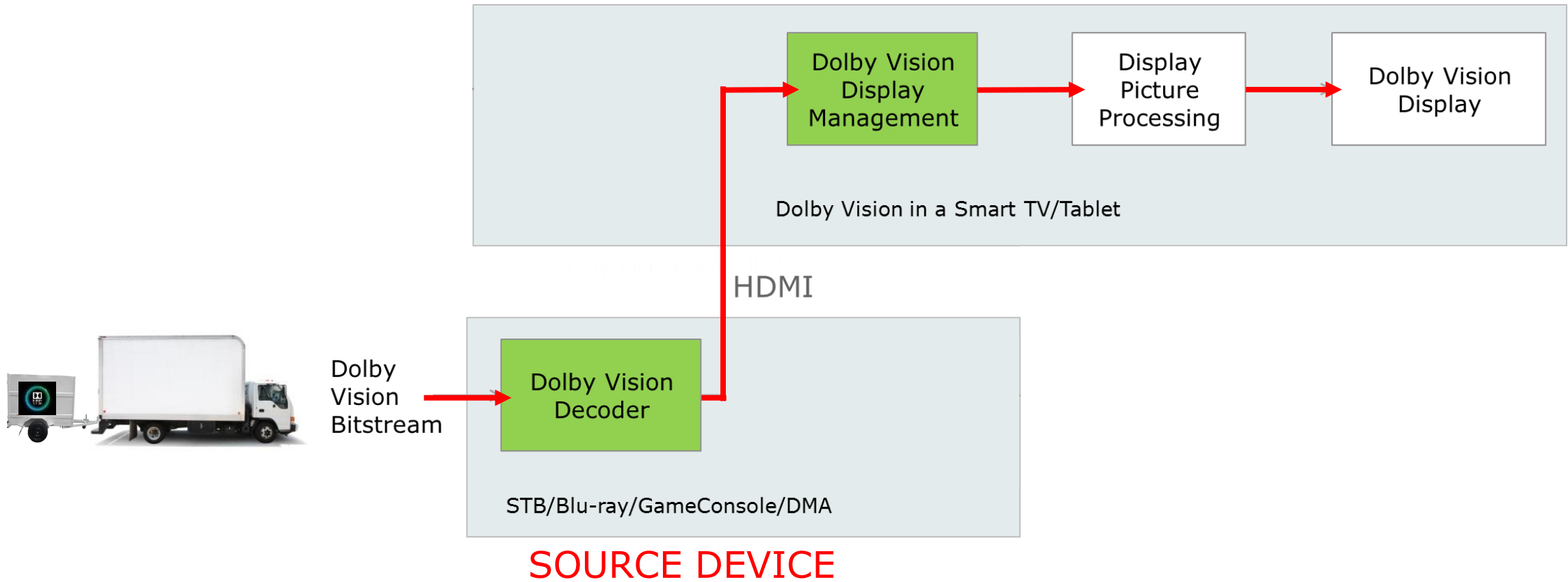
- Current Devices
 - Can only receive content that fits into Rec.709/100nits container
 - 'stretch' this content to properties of displays
- Dolby Vision Devices
 - Will decode content that fits into Rec.2020/10,000nits container
 - Map content in deterministic manner to properties of displays



Enablement of Dolby Vision on Consumer Devices



Enablement of Dolby Vision on Consumer Devices



Enablement of Dolby Vision on Consumer Devices

