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## TV Brand Licensing: A Maze of Deals

As with any consumer electronics product, profitability is the end goal for the manufacturing parties involved. And as big name traditional Japanese and European TV manufacturers watched profit margins drop, they turned to a different strategy that has proven to be lucrative and enticing for companies entering the TV market or enlarging their existing footprint. Brand licensing is now a widely used practice, and recent increased activity is transforming the TV market.

As countries continue to transition from analog to digital television broadcasting, and new technologies like 4K Ultra High Definition (UHD) emerge, global TV shipments continue to log annual growth. Simultaneously, retailers and manufacturers are in a battle for market share that is driving down prices—and profits—swiftly. This battle has ushered in the trend where established manufacturers out-license their brands to licensees that can leverage the trust and dependability that consumers already have in established brands.

As of yet, mostly Asian contenders looking for immediate access to retail shelves in developed markets have turned to licensing established consumer electronics brands as a viable tactic for market entry. In addition to creating trust, these brands allow manufacturers to compete with opening-price-point lines designed to generate market share results in a fraction of the time and cost of introducing a brand from the ground up.

Out of a national class that once included Fujitsu, Funai, Hitachi, JVC, Mitsubishi, NEC, Panasonic/Quasar, Pioneer, Sanyo/Fisher, Sharp, Sony, and Toshiba, only a few—Funai, Hitachi, NEC, Panasonic, Sharp and Sony—continue to maintain active global TV marketing businesses. In many areas of the world, brands such as JVC, Pioneer, Sanyo and Toshiba are now marketed by companies other than the original manufacturers. Even Sharp, which had the foresight to develop liquid crystal display (LCD) panel production facilities early on, has licensed its brand for the European TV business to Universal Media Corporation/Slovakia/s.r.o., and a portion of the brand in the United States to retail giant Best Buy.

These licensing deals can be complex and are in constant flux. The table outlines a handful of some of the world's most prominent TV brand relationships. A more comprehensive list is available in the "Brand Licensing in Today's Global Television Marketplace" white paper.

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Digital Tech Consulting is a market research firm providing strategic information and analysis to help companies succeed in the consumer digital marketplace. To learn more about DTC and how our analysts might help your company, please contact us at the information below.

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### Select Key TV Brand Licenses in Use Today

<i>Licensed TV Brand</i>	<i>Licensor(s)</i>	<i>Licensee</i>
Apex	Sichuan Changhong Electric Co., Ltd	TMAX Digital/ North America
Emerson	Emerson Radio Corp.	Funai Electric   Select territories
JVC	Victor Co. of Japan	AmTran   Multiple territories
Pioneer	Pioneer Corp.	Dixons Carphone   UK/Europe
Sanyo	Panasonic Corp.	Funai Electric   North America
Thomson	Technicolor	TCL   Europe
Toshiba	Toshiba	Compal Electronics   Taiwan (US)

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While licensors can profit from the proper use of a brand without taking on the risks and obligations of manufacturing and marketing for themselves, there are inherent risks and challenges involved. Licensors and their agents have to be diligent and deliberate brand stewards. Perhaps most importantly, they must protect their valuable reputational equity by monitoring product quality. They also need to measure the brand's continued success by independently tracking sales to ensure royalty payment compliance, while establishing reasonable sales forecasts for changing market conditions.

While brand licensing may seem like a simple concept, untangling the web of deal details and identification of all the players can be daunting. DTC's latest white paper, "Brand Licensing in Today's Global Television Marketplace", is designed to give a more detailed look at the reasons companies engage in brand licensing, the players involved, and some of the risks and challenges that are met when entering into a licensing agreement. DTC is also conducting a specialized tracking study, to help companies track unit shipments and develop a deeper understanding of the complicated value chain and complex TV brand licensing agreements between licensors, licensees and original equipment manufacturers (OEMs). For more information on the white paper or the Tracking Service, please contact Myra Moore at 214.915.0930.

## UHD: Unfinished High Definition

Ultra High Definition TV (UHDTV), or 4K TV, is a fait accompli as far as TV marketing is concerned. TV makers and retailers are bringing nearly all their product design, promotional and marketing powers to bear to their sale, lured by UHD's higher profit margins.

Despite TV makers' enthusiasm, they are currently selling what could be labeled as unfinished product. There are still technologies and specifications being developed or perfected that are likely to make current UHDs archaic obsolete.

Leading UHD manufacturers are already laying out good-better-best UHD product propositions – standard UHD sets, UHD sets that will accommodate some sort of wider color gamut (WCG) technology and, most recently, quantum dot technology, which helps display the brightest colors possible for an LCD.

LG is presenting an even more premium UHD alternative: organic light-emitting diode (OLED). OLED uses a plasma-like emissive technology with naturally brighter colors thanks to its self-illuminating pixels, with none of the frame rate/refresh issues that nag transmissive/backlight-based LCD UHDs. But OLED UHDs are twice to three times the price of other UHD models.

Looming on the horizon is the premium technology of High Dynamic Range (HDR), which promises to completely recalculate the UHD sales equation.

### Developing UHD Technologies

While LG hopes to bring down OLED prices and manufacturers seek to boost the color gamut on LCD UHDs, several other UHD-centric technologies are still unfinished or unavailable.

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## NEW TRACKING SERVICE ANNOUNCED

### Global TV Brand Licensing Study

DTC is conducting a specialized tracking study to help companies better understand the complicated value chain and complex TV brand licensing agreements currently shaping the global marketplace. On a quarterly basis, companies participating in the study will receive dependable market intelligence on the latest brand licensing agreements, estimated number of worldwide shipments and market share by brand and licensee.

Call 214.915.0930 ext. 1 to participate. Join the annual multi-client study early and receive additional consulting from our primary analysts on this project.

For instance, 4K content copy protection is still being configured. This past February the High-bandwidth Digital Content Protection (HDCP) encryption specification was updated to v2.2 to protect 4K content being moved through varying connected 4K devices.

A month later, the Secure Content Storage Association (SCSA), a consortium of hardware, software and content companies, released a copy-protected standard for downloadable 4K content, expected to be available for hardware implementation this summer.

Manufacturers also are working to expand the color capabilities of UHD. Reaching the Rec. 2020 (aka BT.2020) color specifications is unlikely, but once fully implemented, quantum dot technology can reproduce a good portion of Rec. 2020, as can OLED UHDs.

### High Dynamic Revolution

But it is high dynamic range that has the potential to remake the UHD market.

HDR can expand UHD's luminance dynamic range to 10,000:1 to dramatically expose heretofore hidden details in ultra bright or ultra dark scenes. While consumers may have trouble differentiating between HD and UHD sets, differences between high-contrast HDR and non-HDR UHD TVs will be obvious.

At CES a variety of UHD TV makers announced models with some sort of HDR technology – Samsung's "expanded" dynamic range in its SUHD series, Sony's "x-tended" dynamic range and Panasonic's Dynamic Range Remaster. LG, Sharp and TCL also displayed HDR-enabled UHD models.

Vizio has opted to go with Dolby for its Dolby Vision HDR technology. Last month Vizio demonstrated the first UHD imbued with Dolby Vision, which also is included as an option in the 4K Ultra HD Blu-ray specification.

In order for HDR to become a factor, content has to be mastered in HDR. This week, Samsung announced its HDR UHD Video Pack set-top hard drive. When it appears next month, the Pack will include two HDR-mastered films, likely from Fox. The first Dolby Vision-mastered titles will be coming from Warner Bros.

Whether or not a Dolby Vision-mastered film can be viewed on a UHD TV with a different HDR technology remains to be seen. One of the goals of the newly-formed UHD Alliance (whose founders include Fox, Warner Bros., Disney, Samsung, Sony, Panasonic, Sharp, DirecTV, Netflix, Dolby and Technicolor) is to set standards for many of these technologies, including HDR.

To accurately display HDR and the varying wider color gamut technologies, such as quantum dot, UHD sets need to improve from 8-bit color (16.7 million shades) to so-called "deep" color — 10- (1.073 billion shades) or even 12-bit (68 billion shades).

Early last month, the HDMI Forum released the HDMI 2.0a specifications, which accommodate 4K at 60p as well as expanded HDR chroma and luminance capabilities. HDMI 2.0 UHDs are not necessarily upgradable to 2.0a – some UHD makers say it can be, others say it can't. In all events, UHDs equipped with HDMI 2.0a aren't likely to appear until later this year.

Considering these HDR color, contrast, copy-protection and connectivity compatibility and capability tasks facing the Alliance, UHD may remain unfinished for some time.

## Virtual Reality: The Future of Video Entertainment or the Next Dead End?

There's a new immersive video technology gaining momentum in the consumer market. It requires headgear. It can make people sick. No, it's not 3D. It's virtual reality.

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There's no hard-and-fast definition for what constitutes a consumer virtual reality (VR, for short) experience. For our purposes, we'll define it as an experience that completely encapsulates a viewer in a 180 x 360-degree video delivered via specialized headgear.

Like 3D, though, virtual reality isn't a recent fad. In 1820's England you could visit the "Panorama of Regents Park," an immersive 360-degree painting that was over 50 feet in height, with two viewing platforms inside its own Colosseum-style building. And, much like 3D in the home, VR is being carried aloft on the wings of media hype and tech investment.

The big question is whether VR, like 3D, is ultimately destined to fizzle out or whether it really is a revolution in video entertainment.

The current VR boomlet began with Facebook's purchase of Oculus VR, makers of the Oculus Rift headset, for a cool \$2 billion. The purchase seemed to validate the notion that VR has a pivotal role to play as the "platform of tomorrow," in the words of Facebook founder Mark Zuckerberg. Additional investments — in production gear, software, content development, even VR "theme parks" — quickly followed from a range of players in Silicon Valley and in the consumer electronics market.

Perhaps most prominent to date, certainly for consumers, has been the rush of VR headsets. As of this writing there are nearly a dozen headsets either on the market or due to arrive in the next 18 months. The headsets divide almost evenly between high-powered gaming models, such as the aforementioned Oculus Rift, due in 2016, and Sony's Project Morpheus, which is also coming next year, and a selection of lower-cost headsets that rely on mobile phones to work. The latter category was kicked off by Google's open-source Cardboard project, which is essentially a foldable cardboard head mount for your phone with biconvex lenses inside. Anyone can build a Cardboard-based headset or buy one for about \$25. There's also a software development kit (SDK) so app makers can build VR apps that are compatible with Cardboard headsets.

Speaking at the recently concluded NAB show, Arthur van Hoff, founder of Jaunt VR, said that while gaming has overshadowed VR's "cinematic" potential, it's the latter that will constitute the mainstream VR experience. "Games make people sick," van Hoff said, but cinematic VR "was a logical extension of entertainment." By cinematic VR, van Hoff meant traditional entertainment packaged into a more immersive and interactive experience. Rather than a viewer traveling to Las Vegas to watch the next "fight of the century," a VR camera with a 180 x 360 degree field of view could occupy a front-row seat and broadcast a VR experience that almost literally gives you the feeling that you're "there."

Some of the technological pieces, such as fast-refreshing, high resolution OLED displays, gyroscopes and accelerometers to track head motion, are here and even rather mature, van Hoff said. VR recording doesn't need specialized cameras per se, but specialized rigs that group multiple cameras together. The video files from these cameras do require specialized software for stitching, but video can be captured at standard resolutions and frame rates, and in standard codecs (H.264, primarily). Still, a host of other challenges, such as 3D audio recording, VR special effects and even the craft of telling a visual story when a viewer's eyes can roam freely across an enormous field of view, remain daunting, van Hoff noted.

Shortly after the show, the company announced a new division, Jaunt Studios, headed by a Lucasfilm alum, to tackle those challenges and educate Hollywood in the production of VR.

Despite the proliferation of VR hardware and the slow accumulation of VR content, it remains an open question whether VR in either its gaming or its cinematic variants will gain real traction. Even van Hoff conceded during a post talk interview that his company was more focused on "creating a new industry by giving away great content" and only later would they "figure out what the business model is."

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For consumers, access to a decent VR experience through a mobile phone may not be expensive, but it's still intrusive and isolating. Once the headset goes on, you're essentially in your own world. Spend too much time in the headset, and vertigo and disorientation can set in (there's a term for this: "sim sickness"). Advertisers like Marvel and HBO are producing VR ads, but consumers will need more than slick marketing campaigns to convince them to don the face-swallowing head mounts.

Nonetheless, in contrast to 3D TV, VR doesn't feel gimmicky, just immature. More pieces need to fall into place to make the experience completely transportive, but as the Victorians who flocked to the Panorama of Regents Park would no doubt attest, the need to escape this reality runs strong.

