

Techno Systems Research Co.,LTD (TSR)

URL www.t-s-r.co.jp

Iwamoto-cho 3-chome, Chiyoda-yu, Tokyo

Masao Fujita (CEO)

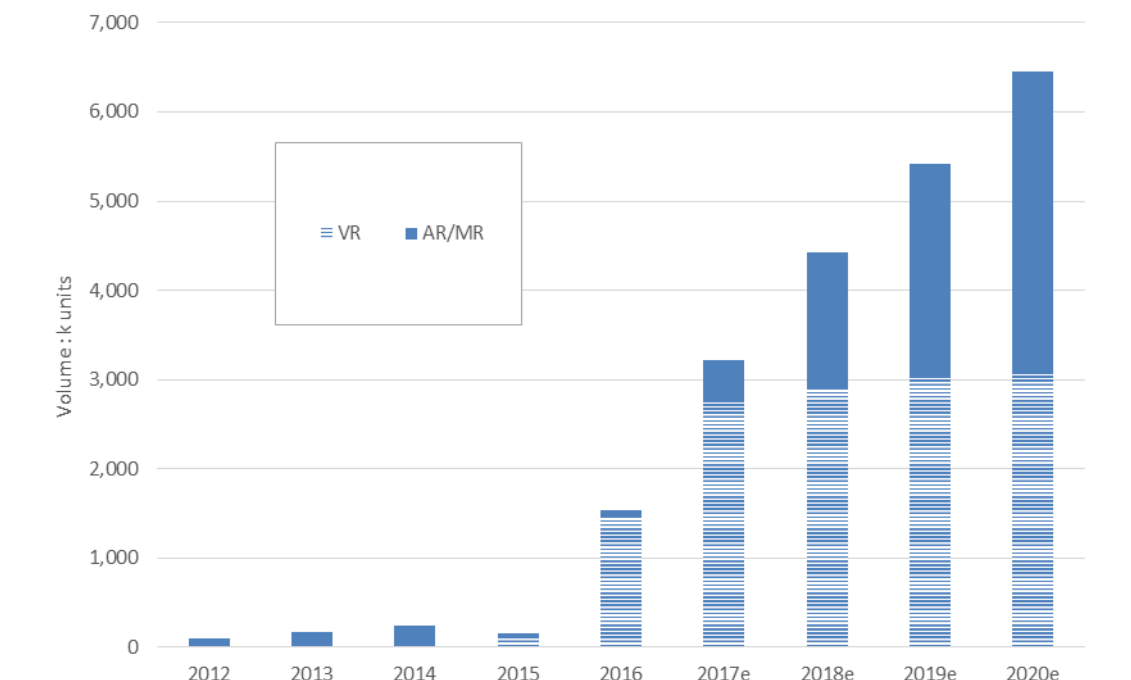
TSR - Press Release

Market forecasts on Head-Mounted Display (VR、AR/MR)

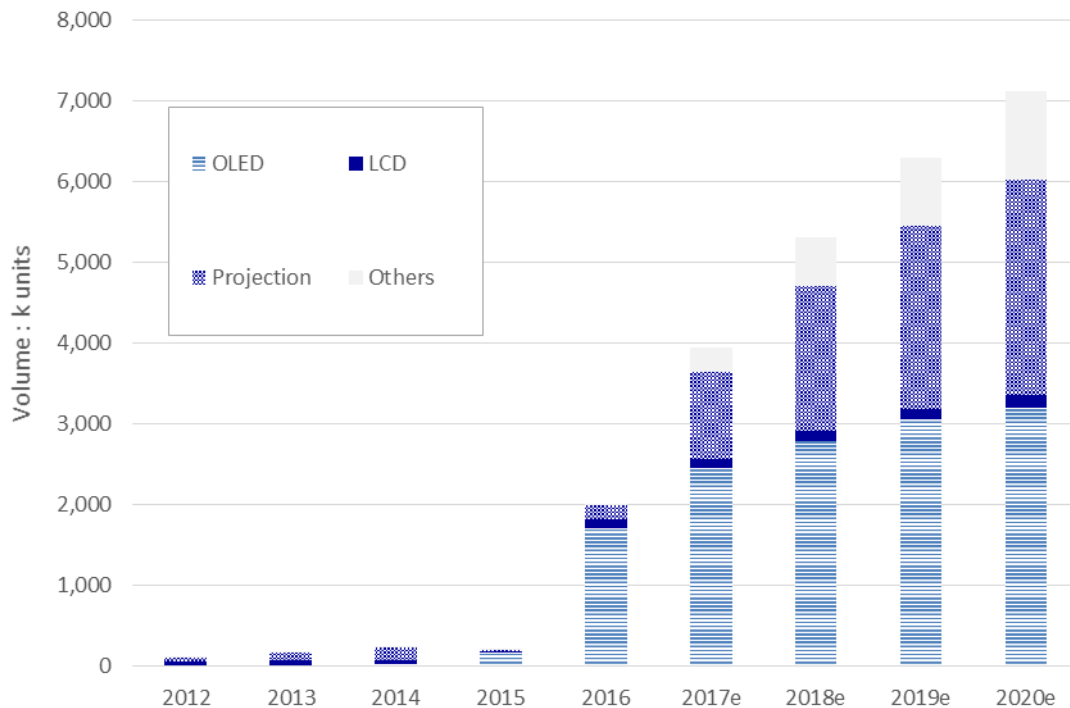
- Emerging HMD market in 2017 and the new core technologies for display toward 2020 -

Techno Systems Research Co.,LTD (TSR) releases the new report 'Marketing Analysis of Projection Business'. The report analyzes value-added technologies in projector market, and forecasts Head-Mounted Display (HMD) market (excluding Mobile type with smartphone attached), where projection technologies are utilized for VR and AR/MR. It was practically the first year for VR market in 2016. Approximately 1.5 million units of HMDs including AR (but without Mobile types with smartphone attached) were shipped. VR represents 1.45 million units of the total HMD markets. AR/MR applications are also expected to expand in volume from the second half of 2017, consequently the volume of HMD will climb up to approximately 6.5 million units in 2020.

[Growth of HMD market: VR and AR/MR]



[OLED and Projection technologies in HMD market]



As for display technologies, the report points out OLED type has an advantage of VR technology, Projection type of AR/MR respectively. Many of VR goggles utilize OLED because display with faster response time and high refresh rate is strongly demanded for avoiding so-called Virtual reality sickness. On the other hand, AR products is analyzed to be suitable for projection type with micro-display, pursuing smaller and lighter weight products.

Furthermore, the report analyzes Head-Up Display (HUD) as a new application where projection technologies are applied, and Light Field Display (LFD) which is expected to be a core technology for the future display toward 2020. The status of these markets and advantages of the projection over existing technologies are described in the report.

※ Please contact below for further information

【Contact for further information】

Techno Systems Research Co.,LTD

Group 1,

Junichi Kimura (kimura@t-s-r.co.jp)

Tel: +81.3.3851.5651