

## Supply Chain

| Step    | High-Level Activity  | Product Category              | Product Detail   |
|---------|----------------------|-------------------------------|--|
| Create  | Acquisition          | Cameras                       | Digital cinema cameras   |
| Create  | Acquisition          | Cameras                       | Film cameras   |
| Create  | Acquisition          | Cameras                       | Broadcast system cameras   |
| Create  | Acquisition          | Cameras                       | Super slow-motion system cameras   |
| Create  | Acquisition          | Cameras                       | Shoulder ENG/EFP cameras   |
| Create  | Acquisition          | Cameras                       | SLR video cameras  |
| Create  | Acquisition          | Cameras                       | Professional camcorders  |
| Create  | Acquisition          | Cameras                       | PTZ cameras  |
| Create  | Acquisition          | Cameras                       | Specialist, POV, action cameras  |
| Create  | Acquisition          | Cameras                       | VR and 180/360 cameras   |
| Create  | Acquisition          | Camera Accessories            | Camera lenses  |
| Create  | Acquisition          | Camera Accessories            | Camera lens accessories  |
| Create  | Acquisition          | Camera Accessories            | Camera support and grip  |
| Create  | Acquisition          | Camera Accessories            | Camera pedestals   |
| Create  | Acquisition          | Camera Accessories            | Camera power and batteries   |
| Create  | Acquisition          | Camera Accessories            | Bags, cases, protection  |
| Create  | Acquisition          | Camera Accessories            | Wireless camera systems  |
| Create  | Acquisition          | Camera Accessories            | Prompters  |
| Create  | Acquisition          | Camera Accessories            | Camera drones  |
| Create  | Acquisition          | Audio Acquisition             | Microphones and microphone systems   |
| Create  | Acquisition          | Audio Acquisition             | Wireless radio microphone systems  |
| Create  | Acquisition          | Audio Acquisition             | Portable recorders and location mixers                                       |
| Create  | Acquisition          | Audio Acquisition             | Audio acquisition accessories  |
| Create  | Acquisition          | Lighting                      | On-camera lighting   |
| Create  | Acquisition          | Lighting                      | Lighting systems   |
| Create  | Acquisition          | Social/UGC                    | Content/data acquisition from public sources                                 |
| Produce | Real-Time Production | Real-Time Production Graphics | Production graphics and CG   |
| Produce | Real-Time Production | Real-Time Production Graphics | Virtual sets and chromakey   |
| Produce | Real-Time Production | Real-Time Production Graphics | Telestration graphics  |
| Produce | Real-Time Production | Video Production              | Production switchers   |
| Produce | Real-Time Production | Video Production              | Real-time production video servers   |
| Produce | Real-Time Production | Video Production              | Real-time production replay and slow-motion servers                          |
| Produce | Real-Time Production | Video Production              | Production automation systems  |
| Produce | Real-Time Production | Video Production              | Newsroom production management and automation systems                        |
| Produce | Real-Time Production | Audio Automation              | Audio automation   |
| Produce | Real-Time Production | Audio Production              | Audio mixers and consoles - radio  |
| Produce | Real-Time Production | Audio Production              | Audio mixers and consoles - music  |
| Produce | Real-Time Production | Audio Production              | Audio mixers and consoles - television production                            |
| Produce | Real-Time Production | Production Services           | Studio and stage facilities  |
| Produce | Real-Time Production | Production Services           | Outside broadcast and mobile facilities                                      |
| Produce | Manage Production    | Production Software           | Project, resource and facilities management software                         |
| Produce | Manage Production    | Production Software           | Pre-Production development, scripting and screenwriting software             |
| Produce | Manage Production    | Production Software           | Timecode, shot-logging, metadata capture, transcription and dailies software |
| Produce | Manage Production    | Production Software           | Newsroom computer systems (NRCS)   |
| Produce | Manage Production    | Post-Production Software      | Production asset management (PAM)  |
| Produce | Manage Production    | Post-Production Software      | Collaboration, review and approval   |
| Produce | Manage Production    | Post-Production Software      | Playlist/package mastering software  |
| Produce | Post-Production      | Film Transfer                 | Telecine and film scanners   |
| Produce | Post-Production      | Ingest                        | Post-production ingest   |
| Produce | Post-Production      | Editing and Finishing         | Non-linear editing   |
| Produce | Post-Production      | Editing and Finishing         | Color correction and grading   |
| Produce | Post-Production      | Editing and Finishing         | Video enhancement and restoration tools                                      |
| Produce | Post-Production      | Editing and Finishing         | Processing incl. hardware acceleration and I/O cards                         |
| Produce | Post-Production      | VFX & Graphics                | Compositing, graphics/CGI and animation tools                                |
| Produce | Post-Production      | VFX & Graphics                | Special Effects and VFX plug-ins   |
| Produce | Post-Production      | VFX & Graphics                | Facial animation tools   |
| Produce | Post-Production      | Audio Post-Production         | Audio mixers and consoles - post production                                  |
| Produce | Post-Production      | Audio Post-Production         | Digital audio workstations, editing, effects and processing                  |
| Produce | Post-Production      | Post-Production Services      | Post-production services   |
| Produce | Post-Production      | Post-Production Services      | Creative services  |

|         |                            |                                    |  |
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| Manage  | Manage & Orchestrate       | Content & Workflow Management      | Media asset management (MAM)                                   |
| Manage  | Manage & Orchestrate       | Content & Workflow Management      | Supply chain management and orchestration                      |
| Manage  | Manage & Orchestrate       | Content & Workflow Management      | Content data analysis  |
| Manage  | Manage & Orchestrate       | Content & Workflow Management      | Operational data analysis                                      |
| Manage  | Manage & Orchestrate       | Content & Workflow Management      | Archive and preservation management                            |
| Manage  | Manage & Orchestrate       | Content & Workflow Management      | Storage management   |
| Manage  | Manage & Orchestrate       | Content & Workflow Management      | End-to-end supply chain solutions                              |
| Manage  | Manage & Orchestrate       | Data & Metadata Management         | (Meta)data aggregation and management                          |
| Manage  | Manage & Orchestrate       | Data & Metadata Management         | Consumer-facing data management                                |
| Manage  | Prepare                    | Content Preparation                | File-based technical QC  |
| Manage  | Prepare                    | Content Preparation                | Compliance control   |
| Manage  | Prepare                    | Content Preparation                | Automated metadata extraction                                  |
| Manage  | Prepare                    | Content Preparation                | Transcode and normalization                                    |
| Manage  | Prepare                    | Content Preparation                | Content and metadata packaging                                 |
| Manage  | Prepare                    | Content Preparation                | Access services and localization tools                         |
| Manage  | Prepare                    | Content Services                   | Content management and preparation services                    |
| Manage  | Prepare                    | Content Services                   | Access services and localization service providers             |
| Publish | Linear Playout             | Linear Playout Systems             | Playout automation   |
| Publish | Linear Playout             | Linear Playout Systems             | Integrated playout (channel-in-a-box)                          |
| Publish | Linear Playout             | Linear Playout Systems             | Channel branding graphics and promotion systems                |
| Publish | Linear Playout             | Linear Playout Systems             | Master control switchers                                       |
| Publish | Linear Playout             | Linear Playout Systems             | Subtitling/closed captioning insertion                         |
| Publish | Linear Playout             | Linear Playout Systems             | Compliance recording   |
| Publish | Linear Playout             | Linear Playout Systems             | Edge playout/insertion devices                                 |
| Publish | Linear Playout             | Linear Playout Services            | Managed playout services                                       |
| Publish | Non-Linear Publishing      | Non-Linear Publishing Systems      | Cable/IPTV VOD servers and systems                             |
| Publish | Non-Linear Publishing      | Non-Linear Publishing Systems      | Internet/OTT servers and systems                               |
| Publish | Non-Linear Publishing      | Non-Linear Publishing Services     | OTT/OVP managed service platforms                              |
| Publish | Content Protection         | Content Protection & Encryption    | Watermarking and fingerprinting systems                        |
| Publish | Content Protection         | Content Protection & Encryption    | CAS, encryption, DRM   |
| Publish | Venue Exhibition           | Real-Time Playback Servers         | Digital cinema replay servers                                  |
| Publish | Venue Exhibition           | Projectors                         | DCI compliant projectors                                       |
| Publish | Venue Exhibition           | Projectors                         | Professional video projectors                                  |
| Publish | Venue Exhibition           | Large LED Screens                  | Professional screens/signage                                   |
| Publish | Linear Signal Distribution | Distribution & Re-distribution     | Encoding and multiplexing for distribution and re-distribution |
| Publish | Linear Signal Distribution | Distribution & Re-distribution     | Professional IRDs  |
| Publish | Linear Signal Distribution | Distribution & Re-distribution     | Edge devices   |
| Publish | Linear Signal              | Cable Distribution                 | Cable set-top boxes  |
| Publish | Linear Signal              | Cable Distribution                 | Cable middleware   |
| Publish | Linear Signal              | IPTV Distribution                  | IPTV set-top boxes   |
| Publish | Linear Signal              | IPTV Distribution                  | IPTV middleware  |
| Publish | Linear Signal              | Satellite Distribution             | Satellite set-top boxes  |
| Publish | Linear Signal              | Satellite Distribution             | Satellite middleware   |
| Publish | Linear Signal Distribution | Terrestrial Distribution Equipment | Analog TV transmitters   |
| Publish | Linear Signal Distribution | Terrestrial Distribution Equipment | Digital TV transmitters  |
| Publish | Linear Signal Distribution | Terrestrial Distribution Equipment | Analog radio transmitters                                      |
| Publish | Linear Signal Distribution | Terrestrial Distribution Equipment | Digital radio transmitters                                     |

|          |                                      |                                    |  |
|----------|--------------------------------------|------------------------------------|--|
| Publish  | Linear Signal Distribution           | Terrestrial Distribution Equipment | Aerials, towers, RF accessories                          |
| Publish  | Linear Signal Distribution           | Terrestrial Distribution Services  | Terrestrial transmission services                        |
| Publish  | Internet Distribution                | Internet Distribution              | Content delivery networks (CDNs)                         |
| Publish  | Internet Distribution                | Internet Distribution              | Internet distribution platforms (incl. social media)     |
| Monetize | Acquire Content                      | Rights Management                  | Content rights management systems                        |
| Monetize | Acquire Content                      | Rights Management                  | Royalties and participations management                  |
| Monetize | Schedule Content                     | Broadcast Management Systems       | Linear and non-linear scheduling                         |
| Monetize | Schedule Content                     | Broadcast Management Systems       | Traffic  |
| Monetize | Sell Content &                       | Advertising Systems                | Advertising sales systems                                |
| Monetize | Sell Content &                       | Advertising Systems                | Standalone advertising analytics                         |
| Monetize | Sell Content &                       | Advertising Systems                | Programmatic and addressable advertising platforms       |
| Monetize | Sell Content & Advertising           | Subscription & CRM Systems         | Subscriber CRM, billing, subscriptions and ecommerce     |
| Monetize | Analyze Data                         | Content Planning                   | Content-needs planning                                   |
| Monetize | Analyze Data                         | Data Analytics                     | Consumer data analysis                                   |
| Consume  | User Experience                      | Identity Management                | Consumer identity management                             |
| Consume  | User Experience                      | UI & UX                            | Consumer UI and UX design                                |
| Consume  | User Experience                      | Apps & Platforms                   | Consumer apps and platforms                              |
| Connect  | Provide Connectivity                 | Connectivity & Bandwidth           | Fiber and private IP connectivity                        |
| Connect  | Provide Connectivity                 | Connectivity & Bandwidth           | Internet direct connect                                  |
| Connect  | Provide Connectivity                 | Connectivity & Bandwidth           | Satellite connectivity                                   |
| Connect  | Provide Connectivity                 | Connectivity & Bandwidth           | Mobile/cellular connectivity                             |
| Connect  | Provide Connectivity                 | Access Connectivity                | Fixed satellite antenna and ground stations              |
| Connect  | Provide Connectivity                 | Access Connectivity                | ENG, SNG and flyaways                                    |
| Connect  | Provide Connectivity                 | Access Connectivity                | Bonded cellular devices                                  |
| Connect  | Provide Connectivity                 | Access Connectivity                | Microwave links (fixed, portable)                        |
| Connect  | Real-Time Signal                     | Intra-Facility Connectivity        | SDI video routers  |
| Connect  | Real-Time Signal                     | Intra-Facility Connectivity        | Hybrid SDI-IP video routers                              |
| Connect  | Real-Time Signal                     | Intra-Facility Connectivity        | Router control   |
| Connect  | Real-Time Signal                     | Intra-Facility Connectivity        | Timecode/sync generation and master clock                |
| Connect  | Real-Time Signal                     | Intra-Facility Connectivity        | IP networks and switches and SDVN                        |
| Connect  | Real-Time Signal                     | Inter-Facility Connectivity        | Video-over-internet                                      |
| Connect  | Real-Time Signal                     | Inter-Facility Connectivity        | Remote production tools                                  |
| Connect  | Real-Time Signal                     | Inter-Facility Connectivity        | Contributor feeds (voice and video calls)                |
| Connect  | Real-Time Signal                     | Inter-Facility Connectivity        | Live and high-density transcoders                        |
| Connect  | Real-Time Signal                     | Inter-Facility Connectivity        | Contribution encoders                                    |
| Connect  | Real-Time Signal Transfer            | Video Interfacing & Conversion     | Modular interfacing and signal processing                |
| Connect  | Real-Time Signal Transfer            | Video Interfacing & Conversion     | Standalone interfacing, signal processing and conversion |
| Connect  | Real-Time Signal Transfer            | Video Interfacing & Conversion     | Fiber interfaces   |
| Connect  | Real-Time Signal Transfer            | Audio Interfacing & Conversion     | Audio signal processing, routing and infrastructure      |
| Connect  | File Transfer                        | File & Object Delivery             | File transfer and delivery.                              |
| Store    | Real-Time Storage                    | VTRs & DVRs                        | VTRs and disk/memory card-based player/recorders         |
| Store    | Real-Time Storage                    | VTRs & DVRs                        | Digital video recorders                                  |
| Store    | Real-Time Storage                    | Video Servers                      | Media servers  |
| Store    | File-based & Object                  | Portable Storage                   | Camera media   |
| Store    | File-based & Object                  | Portable Storage                   | Portable RAID hard drives                                |
| Store    | File-based & Object                  | On-Premise Storage                 | High-performance shared storage                          |
| Store    | File-based & Object                  | On-Premise Storage                 | Near-line object storage                                 |
| Store    | File-based & Object                  | On-Premise Storage                 | Near-line NAS/SAN storage                                |
| Store    | File-based & Object                  | On-Premise Storage                 | Off-line/archive storage                                 |
| Store    | File-based & Object                  | On-Premise Storage                 | Removable storage media                                  |
| Store    | File-based & Object                  | Cloud Storage                      | Cloud object storage                                     |
| Store    | File-based & Object                  | Cloud Storage                      | Cloud archive storage                                    |
| Support  | Monitoring, Control & Communications | Video Monitoring                   | Video monitors   |
| Support  | Monitoring, Control & Communications | Video Monitoring                   | Multiviewer display processors                           |
| Support  | Monitoring, Control & Communications | Video Monitoring                   | KVM and PCoIP systems                                    |

|         |                                      |                             |  |
|---------|--------------------------------------|-----------------------------|--|
| Support | Monitoring, Control & Communications | Audio Monitoring            | Loudspeakers                                     |
| Support | Monitoring, Control & Communications | Audio Monitoring            | Headphones                                       |
| Support | Monitoring, Control & Communications | Audio Monitoring            | Audio measurement and loudness control           |
| Support | Monitoring, Control & Communications | System Monitoring & Control | Broadcast system control SW and HW               |
| Support | Monitoring, Control & Communications | System Monitoring & Control | Under-monitor displays, signage and tallies      |
| Support | Monitoring, Control & Communications | System Monitoring & Control | Network management, monitoring and orchestration |
| Support | Monitoring, Control & Communications | System Monitoring & Control | Resource monitoring systems                      |
| Support | Monitoring, Control & Communications | System Monitoring & Control | Data-driven analysis and self-healing            |
| Support | Monitoring, Control & Communications | Test & Measurement          | Test and measurement equipment and software      |
| Support | Monitoring, Control & Communications | Communications              | Wired, IP and wireless intercoms and talkback    |
| Support | Secure                               | Access                      | Single-sign on and authentication                |
| Support | Secure                               | Protect                     | Cybersecurity and intrusion detection            |
| Support | Compute                              | On-Premise Compute          | Servers and blades                               |
| Support | Compute                              | On-Premise Compute          | Virtualization and private cloud                 |
| Support | Compute                              | Cloud Compute               | Cloud compute                                    |
| Support | Compute                              | Cloud Compute               | Other IaaS or PaaS                               |
| Support | Design, Build, Run                   | Facility Hardware           | Structured wiring, cables, connectors            |
| Support | Design, Build, Run                   | Facility Hardware           | Racks and power distribution                     |
| Support | Design, Build, Run                   | Facility Hardware           | Network power management/intelligent PDUs        |
| Support | Design, Build, Run                   | Facility Hardware           | Technical furniture                              |
| Support | Design, Build, Run                   | Facility Hardware           | OB and SNG vehicle coachbuilding                 |
| Support | Design, Build, Run                   | Implementation Services     | Consulting services                              |
| Support | Design, Build, Run                   | Implementation Services     | Design and build systems integration services    |
| Support | Design, Build, Run                   | Implementation Services     | Software development and integration services    |
| Support | Design, Build, Run                   | Rental Services             | Dry-hire / rental                                |