Key Code Media Executive Summary

Key Code Media is a full-service consulting, design, sales, service and audio-visual integration solution provider. Founded in 2001, Key Code Media is a $44 million Company, headquartered in Burbank, California, with additional California offices in San Francisco and Newport Beach, along with offices in Denver, Seattle, Dallas, Chicago, Detroit and New York. Our competencies in AV integration are derived from our original business in broadcast technology. The requirements for the infrastructure, cabling and audio visual are high minimizing air downtime and we bring that rigorous approach to our AV work. We are fully committed to advanced technologies while minimizing the risk of complexity for client usage and implementation. Key Code Media is a licensed high and low voltage California contractor (#1010561). Key Code Media is qualified for bid and performance bonds up to $25M.

Key Code Media's ERP/CRM Project management tools are cloud based in AWS where all employees, clients and sub-contractors can log in and web or app based dashboards are available for both Key Code employees and the UC project stakeholders to view stages and status of the integration, deployment, training and support.

Key Code Media encompasses the full spectrum of professional AV services to design new modern conference facility. Key Code Media brings a comprehensive team of industry professionals with expertise in classroom automation, broadcast studio design, conference rooms, government council chambers, OTT/cloud services, Asset Management Workflows, Storage, Editorial, Cameras, Projectors and Archive. Our government and educational references include large projects at Santa Monica College, City of Los Angeles, Oklahoma State Speers Business School, City of Burbank, City of Costa Mesa, Kellogg School of Management at Northwestern University and KCRW. Our integration philosophy is to present a true collaboration with UC stakeholders to insure every aspect of your current operations, and your new goals are achieved successfully. Presently we have 32 field engineers employed of our 75 employees.

What differentiates us is a creative balance between traditional AV and the integration of IP. Our drive and focuses to achieve successful outcomes for our clients. We are ethical, committed to the industry and always striving to improve our employees through extensive industry training and education leading to consistently improved client satisfaction. Our President and sole shareholder, Mike Cavanagh is a UCLA graduate, California resident, who has a great affinity for public education model of the UC Schools. It is our objective to provide audio visual deployments maximizing the University of California's mission educating a workforce that keeps the California economy competitive as well continuing education for Californians to improve their job skills and enhance the quality of their lives.

Qualifications and Firm History

Key Code Media/Burst was founded in 2001. We are a Chapter S Corporation, owned 100% by Michael Cavanagh. Our corporate headquarters are located in Burbank, California, with offices in Seattle, Chicago, Detroit, and New York. Key Code Media has 60 employees and 25 of them are Engineering and Technical Support. Our Company focus is designing, integrating and supporting video and audio production systems.

Key Code Media is a full-service consulting, design, sales, integration and support provider for the digital media market. This includes production and post-production technologies for markets including Corporate, Government, House of Worship, Education, as well as traditional Media and Entertainment facilities. As a licensed contractor we provide turnkey solutions including structured cabling through go-live support and ongoing maintenance; as well as complete broadcast and distribution facilities.

Key Code Media is a full-service consulting, design, sales, service and integration provider for the digital media market. This includes production and post-production technologies for content creation, complete broadcast and distribution facilities, and Audio visual systems for many cities and also service contracts for Cities like city of LA for 21 years.

Established in 2001 as a Value-Added Reseller to the Hollywood post-production community, Key Code has continued to grow and expand over the years offering the best of breed technologies with unrivaled expertise. In 2003 we began expanding and now have operations in Irvine, San Francisco, Seattle, Vancouver, Chicago, and Detroit. Since digital media has become a key focus for communication within every organization, we have also expanded our reach and offer our expertise in content creation and distribution to a wide range of clients including Broadcast, Entertainment, Corporate, Government, Education, and House of Worship.

Key Code Media, Inc is a medium size corporation with 62 employees, headquarter is located in Burbank, CA and has several offices in Seattle, New York, Illinois and Seattle.

The following overview will outline our process and familiarize you with our Consulting and Systems Integration process for the design, integration, commissioning, testing and training for your project. Our comprehensive services will fully address your project needs based on our vast experience designing all levels of systems, including innovative post-production and encoding facilities and complex automated broadcast centers as well as integrated content production and distribution facilities.

At Key Code Media, we maintain an experienced staff of engineers with a variety of certifications, as well as sales professionals with a comprehensive understanding of design, system engineering, and facility operations, and we are constantly training on new and changing technology. In total, we represent well over 100 industry leading manufacturers, including Sony, Panasonic, JVC, HP, Imagine Communication, Grass Valley, Apple, Avid, EVS, Telestream, Quantum, EMC Isilon, Facilis, Editshare, Digital Rapids, AJA, HP, Leader, Waves, Genarts, Sonnet, StorageDNA, NewTek, SNS, and Black Magic, just to name a few. We design, engineer, install and provide service for your facility in an expeditious, cost-effective manner.

All Key Code Media projects, regardless of size, follow a detailed project design, engineering and planning phase, and finally, an install, build and test phase. Each set of project design phase deliverables builds upon the previous one, adding definition and detail. Within each project phase, we follow good engineering practices and standards that abide by all required International, local, state, and federal codes and laws. Over the past 14 years of performing Systems Integration, we have clearly determined a proven method to take your project from start to finish, within your budget and with a fiduciary responsibility. We look after every budget dollar to get you the most purchasing power, on time and within all design specifications. Our

goal is to follow the parameters set out in design and to fulfill your vision. We have developed this very detailed design/build process and we follow it closely.

With customer support and training services as a key element to Key Code Media's success stories, we are confident we can provide the professional execution you require on your upcoming projects.

Our Process

Choosing the right partner for your project is an extremely important decision. The integrator is typically building an infrastructure that your business will rely on for many years after the job is finished. Our multi-phase approach to project fulfillment exceeds the competition in every respect and covers details that are often overlooked.

Manage

Project management is where Key Code Media truly excels. We have developed several processes and tools to ensure your project is correctly managed to complete the integration to your satisfaction. We are well organized with a series of defined processes and open communication when managing the project. The entire project is mapped out in our TimeLinx project management software with every step and resource planned down to the hour.

Analyze

The first and most important step towards realizing the vision you have for your project is to analyze every aspect of your existing Workflow and Process. We identify everything that works and does not work to insure we maximize the effectiveness of all solutions without damaging those aspects that are most important to you.

Define

Before a single product is selected, we define and document your required Workflow, Outcomes, and Economic Objectives. This process builds a clear roadmap that enables an unparalleled ability to evaluate solutions without bias for anything other than your objectives. We avoid the pitfalls of focusing on a specific manufacturer too early in the process and designing with blinders on.

Design

Key Code Media is made up of the most talented individuals in our industry. We design and engineer reliable, robust, budget-conscious solutions that provide an upgrade path for future growth.

Installation

We build upon strong design and engineering principles and take great pride in performing the highest quality work. Every cable is labeled properly, crimped and soldered using industry standard tools. Cables are tightly and neatly dressed into the racks and wire troughs with service loops for easy access and maintenance. At completion of the install, every cable and connector is tested to assure quality and reliability.

Commissioning and Testing

Typically, other integrators use different staff for configuring and testing your systems (completely different from the staff that designed and engineered your system). Our team leaders for design and engineering are also the ones that work on configuration and testing. The team understands the workflow, the engineering, the cabling path and all the specified equipment. The end result is a fully tested and configured system, as planned for in the master design.

Training

The integrator needs to be the coach when training your staff. The Key Code training teams do just that. They understand the workflow and how each step in the workflow affects the next step(s). We coach your team to master the systems we integrate.

Launch (Go-Live)

At Key Code Media we understand that no amount of planning can completely prepare your staff for that first week of going live with your new workflow. That is why we provide Launch Support to insure that the engineers who designed and installed your systems are standing right next to your staff during the initial days of live use.

Service & Support

Key Code Media is there for you to provide long-term support for your system. Depending upon the support package you choose, we offer a range of options for you. We understand that your business relies on this infrastructure continuously and our goal is to make sure that it is operating smoothly. As a leading Systems Integrator, we have had tremendous responsibilities supporting some of the most complex environments in our industry. As a result, we have developed what is considered the best customer support program in the business.

In addition to our comprehensive and proven processes, Key Code Media is financially sound and properly capitalized. You can be confident that we will be here to support you long after your project is complete.

Key Personnel

Key Code Media has developed what may be one of the best teams in the industry. We maintain countless years in combined experience.

Our Professional Services group consists of nearly two-dozen technology professionals who are trained and certified in a wide variety of related technical disciplines. The average experience level of our support team is over seven years as a certified technician. All of our technicians have previously worked in production environments and have real world experience using the solutions we deploy.

Key Code Media ensures that our technicians are current with their knowledge of the products and technology we sell (their certifications are renewed annually). In fact, we are constantly training and improving our knowledge of the products we represent and the workflows we design.

In addition to acquiring Apple, HP and Avid certification, Key Code Media has technical certification from 3rd party vendors that are integral components to every workflow. We are able to act as the warranty agent for these vendors in order to address support and repair issues.

Key Code Media also has a strong team of outside resources. From time to time, these resources are utilized to bring the best industry talents to our projects.

The planned team members for your project include:

Mike Cavanagh- President and CEO

List of Certifications Related to the scope of the project
Key Code Media

Akmal Bastourous, PE
- CTI – Commercial Design Certification
- CTI – P101 and Smart Graphics Certifications (programming certification)
- DMC-S Streaming Certification
- DMC-E-4K Certification
- DMC-D-4K
- AVIA Audio Solutions Certification
- Commercial Lighting Controls – Specifiers Level 100 Certification
- DM-NVX Design and Application Certifications

Kevin Bruce
- DMC-E-4K
- CTI-P101 Programming
- Certified Audio Technician

Edward Locke – VP of Technology
Over 20 years of experience in IT and Entertainment technology working for companies such as Prudential, The Walt Disney Co, and Avid Technology. Participated in the migration of TV stations from Linear to Digital operation, traveling to dozens of stations around the country deploying, training, and providing on-air support for new digital infrastructures. Launched new facilities such as Comcast Sports Net Bay Area and Univision Radio, as well as designing solutions for companies such as Trinity Broadcasting Network, Fuse TV and KCRW.

Don Rooney- Vice President Engineering

Don has over 38 years of broadcast television production and engineering experience with over 200 individual projects to his credit. Prior to joining Burst he was the Director of Special Projects for the Univision Television Group focusing on station relocations and new facilities, and prior to Univision was the Director of Operations and Engineering at Tribune Broadcasting stations in Denver and New Orleans. While at Tribune he was also Engineering Project Manager, reporting to the corporate CTO, his responsibilities included managing multiple projects at the various properties in the Tribune organization. Tribune projects include a multi-million-dollar relocation of Tribune's Washington, D.C. news bureau, Superstation/WGN C-Band uplink installation & migration to multiplexed, encrypted digital transmission and assisted their New Orleans stations with Hurricane Katrina recovery, new facility search, implementation of plans for future disasters and the creation of a back-up/disaster recovery facility. He holds a BA in Communications from Loyola, an FCC General License and is a member of SBE and SMPTE.

Mark Girard- Vice President System Engineering
Mark has over 30 years' experience managing and designing complex technology implementations. Mark has provided senior level consulting for a wide range of high-visibility clients by developing and executing technology roadmaps. Hiring, training, and mentoring teams of highly skilled engineers to deliver high-quality user-experience solutions. Established an E-sports studio to facilitate international presence and broadcasting from the EU for the Riot Games. Developed engineering and installation teams and coordinated efforts across multi-disciplined teams. Helped a Fortune 100 company realize millions in savings in training and productivity by developing broadcast studios to support distance-learning opportunities. Decentralized company-wide training by setting up training centers across the US. Highly skilled at tracking technology advancements to foster enhancements in new media, broadcast, storage, and encoding technologies. Advise on developing new digital business models and capabilities.

Anastabelle Sar- CAD/Design and Documentation Engineer

Ana designs CAD drawings for the production of build-to and as-built system design documentation for Key Code Media clients. Prior to joining Key Code Media, Ana worked for Imagine Communications as one of the lead CAD/Design engineers.

Tim Doring – Sr. Workflow Engineer

With over 30 years Tim has worked for several post production companies and freelanced for companies ranging from Disney to Toyota. In the early 2000's he

helped Trinity Broadcasting Network launch a new youth network named JCTV. After that he took a staff position with TBN and over the next 10 years helped to rebuild the entire post production at all the stations across the US and internationally. During this he was **able** to bring the flow of media from production into post and on to air in a seamless process improving their ability to edit live productions as they aired. Tim now has moved into the system integration arena bringing 30+ years of production and post production experience to bear. He is Avid ACSR certified and understand several other asset management systems. His gift lies in his ability to look at a client's environment and needs and come up with sometimes unorthodox methods of getting them what they need.

Daniel Clark – Project Engineer

7 years of experience across the IT, Audio, and Video Engineering fields. Before arriving at Key Code, Dan was the Director of Production at Next Generation eSports where he oversaw the design, build, and operation of multiple Live to Air studios as well as on-location live production systems. Most
recently he participated as a deployment engineer for the new production, radio, and editing systems deployed at Santa Monica College and KCRW.

References:

Santa Monica College

1900 Pico Blvd, Santa Monica, CA 90405
Brant Looney, IT Director
LOONEY_BRANT@smc.edu 310-261-7635
Campus Wide AV and Radio Station Build – June 2017 - Current
This was a $4.4M project that included a large Production Studio, Television Control room, Audio Control Room, ADR Studio, two Radio Control rooms, three Production
Booths, four Voice Booths, seven Edit Suites, 28 Classrooms, three Conference rooms, and a 180-seat Auditorium. We provided full turn-key integrations services including cabling, install, commissioning, training, and on-going support.

City of Los Angeles

Emergency Operations Center

500 E. Temple St.
Los Angeles, Ca. 90012
Rob Freeman, Assistant General Manager Emergency Management
rob.freeman@lacity.org 213-484-4804
Emergency Operations Center Design Build April 2008 – Current
This was a $5 million project for the design and installation of the Emergency Operations Center (EOC), which houses the Emergency Management Division (EMD), LAPD, and LAFD, as well as the 911 emergency response center. The EOC is a two story building with two large 4x7 video walls utilizing 28 NEC 55" monitors each. They incorporate Jupiter PixelNet video wall processors as well as Crestron control equipment. This building required redundancy in all aspects of the design because of the critical nature of the building that is open 24/7 365 days per year.

City of Los Angeles
Department of Transportation

200 N. Main St. Room B4
Los Angeles, Ca. 90012
Bakhtiar Billah - ATSAC Operation | TEA
bakhtiar.billah@lacity.org 213 978-0150
ATSAC Video Wall and Large Router Design Build June 2017 – December 2017
This was a $800,000.00 project that included taking the City's traffic camera feeds into a large 1024 x 128 video router. Any of the 700 cameras can be routed to the large video wall via Crestron Control System

City of Los Angeles
Bureau of Engineering
1149 S. Broadway Suite 730
Los Angeles, Ca. 90015
Alisa Blake – Systems Division / Director of Systems
alisa.blake@lacity.org 213 485-4515
Multiple Conference Rooms April 2017 – Current
This was initially a design build of a large conference room with a 3x3 Video Wall using 55" monitors and an additional four 78" monitors as side displays and a 16x16 Crestron router for $205,000.00 and has since grown into multiple conference and meeting rooms around the city for the Bureau of Engineering where total costs have exceeded $500,00.00

City of Burbank

275 East Olive Avenue Burbank, CA 91502
Nareg Garabedian - Administrative Analyst
NGarabedian@burbankca.gov (818)-238-5840
Project Cost: $284,325
All deadlines were completed on time.
Council Chamber Upgrade – December 2017
Full Ross Video LCS with Panasonic cameras. Full system integration, wiring, audio and video deployment for the City Council Chambers. Recently featured in the Los Angeles Times.

City of Lawndale

4722 Manhattan Beach Blvd, Lawndale, CA 90260
Paul Bebek – Maintenance Supervisor, Public Works
pbebek@charter.net (310) 973-3263
Project Cost: $101,765
All deadlines were completed on time.
Council Chambers Upgrade – September – 2017
Full Ross Video LCS with Panasonic cameras. Full system integration, wiring, audio and video deployment for the City Council Chambers.

Dallas Cowboys AT&T Stadium project.

When completed this stadium was the cream of the crop in NFL stadiums. Project included: 288x288 SDI router. 192x192 Analog Audio Router. 192x192 AES Audio router. 64x64 data router for machine control. All of this under a unified control system. Three control rooms sharing a large Sony switcher with multiple control surfaces. Large intercom system integrated with two-way radios, phone hybrids, and wireless. XX Fiber interconnects between rack room & truck dock.

Dallas Cowboys World Headquarters & Multi-Use stadium

Headquarters was the location of the core systems and main rack room. This was interconnected with the multi-use stadium located approx. 3,000 feet apart via hundreds of strands of single-mode fiber.
This facility several routers: 288x288 SDI router. 192x192 Analog audio router. 192x192 AES audio router. 18 multiviewer outputs, tied to the routing switcher. MADI & Dante were used throughout the facility for enhanced audio routing. A large Grass Valley switcher with multiple control panels. Large intercom system that was tied into the intercom at their AT&T stadium. A large Podcast studio with 9 cameras, plus a radio production studio. The Multi-use stadium shares the routing switchers but has its own mid-size Grass Valley switcher.

Denver Center for the Performing Arts - Denver, CO

Burst supplied the 4K cameras and other broadcast equipment used by the Denver Center for the Performing Arts (DCPA) to capture and transmit HD content from the DCPA to locations around the world via "The Switch." The Switch is a customer-controlled video switching service available in major media markets in the US and in key international locations. The Red EPIC Dragon Cameras, "Redcast" 4K broadcast modules, Ross Carbonite 4K capable switcher, and other equipment that Burst supplied offer robust 4K live production, capture, and streaming capabilities for an efficient uncompressed 6k / 4K / HD workflow. Operators can also provide Virtual Reality live streams and HR VR Post Stitching capabilities utilizing the Red EPIC Dragon 6K platform for high quality content acquisition.