A Brief 20-Year History of the Independent Programmer

As end-users demand more modernized, adaptable, and cost-effective solutions, the role of control system programmers and software developers will become more essential.

March 17, 2017 Steve Greenblatt

When first introduced in 1997, the concept of a programming service firm to support control systems companies (at the time, Crestron and AMX) was completely unorthodox.

At that time, we were still working with DOS-based software. Systems were just starting to support video conferencing and audio conferencing, and emailing program files for testing the system was a rather new concept.

Control system programming was provided primarily by the control system manufacturers and audiovisual integrators who invested in a trained programmer on staff. Having an outside resource was looked upon as a deficiency rather than an asset.

Fast forward 20 years to today where software and services are considered the future of AV. Companies need to move away from the dependency on hardware and look to provide solutions, experiences, and service-based offerings that today's specialized software companies provide.

Today, many independent programming companies have become AV software companies, and they are in their prime as demand network-based systems, programmable devices, and software solutions become a key focus for the industry.

Partnerships with experts in software development, networking, and device communication continues to be critical to creating, supporting, and maintaining successful AV system solutions for end-user organizations and manufacturers.

But even with the many established, and steadily growing, AV software companies who have been around for 10 years or more, there is still an ongoing identity crisis for the segment which includes larger numbers of sub-contractors who don't necessarily sell, specify, or buy equipment, or get factored into the project food chain.

Along with the ambiguity, there is remains a lack of representation in the industry market for independent programming companies. For example, industry surveys, conference registrations, and multi-discipline groups often overlook the involvement of independent programmers and developers.

According the Bureau of Labor and Statistics, only 30 percent of companies make it to their 10-year anniversary. Despite that, and the odds against the survival of the business model, this fledgling industry segment is doing well for themselves.

The Future of Programming

While there are obstacles, opportunity for growth continues to increase. As end-users demand more modernized, adaptable, and cost-effective solutions, the role of control system programmers and software developers will become more essential.

The work, and overall value they provide, will be significant for companies who want to both maintain and advance their AV technology capabilities. As such, a higher regard should be given for the contributions these specialists bring to the job day in and day out.

AV control system programmers and software developers are not only responsible for the deliverable of programming or software, they play a major role in defining the scope of work for the system functionality. These technology specialists must have diverse knowledge about all aspects of the system to ensure that devices will communicate and function as expected.

In addition, they need advanced troubleshooting skills to be able to isolate problems and propose solutions when the system does not operate as expected. Furthermore, they are responsible for providing ongoing system support – even as needs evolve, requirements change, or hardware is added or substituted.

Looking ahead, the impact of IoT, network security, managed services, and the demand for making complex systems simpler yet smarter, magnifies the critical nature of investing in a programming resource that can provide consistency from project-to-project as well as throughout an enterprise.

While the reputation of independent programming still has a way to go, the segment has made a significant impact on the industry over the last 20 years particularly in regards to the advancement of programmed solutions.

Without companies specializing in programming and services, the ability to keep up with industry demands, satisfy the need to tackle large and complex projects, and provide solutions that address the advancements in technology would be difficult to maintain.

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