



CAD/CAM Integration, Inc.

A Creator of Automation Systems for the Manufacturing Floor

CAD/CAM Integration A Creator of Automation Systems for the Manufacturing Floor CAD/CAM Integration, Inc. is a leading Developer of Automation Systems for the Manufacturing Floor addressing the needs and requirements of small to large size National and International Manufacturing Enterprises.

CCI is located in Haverhill Massachusetts just north west of Boston, Mass. Until our recent move we were in Merrimack for 20 years. We have been privileged to be located near the greatest Universities in the World. Our original founders all attended Universities around the Boston Area with varied Educations and Backgrounds. Educations include Physics, Electrical Engineering, Bio Engineering & Finance. We were also involved in Manufacturing, Systems Development & Machine Tool Controller design. These varied Educations & Experiences have been instrumental in our product development leading to ShopFloorManager. This has been a 32 year Journey.

Born in July of 1983

CCI was born in July of 1983 using a four partner's diverse expertise to develop its first single multi-tasking, multi-user, User Communications System. This system was first installed in a former contractor's facility whose business required the ability to interface very large files to manufacturer's analysis for their customers. Starting with and these CNC's they have grown to over 30 CNC machine tools with Fanuc Controller, Mach Control, Haas Controller & Tencor Controller.

At yes, they are still our customer after 30 years!

Acceptance of PCs

With the acceptance of PCs into the market place, circa 1985, there was a trend to use PCs to provide machine tool communications. CCI responded to these needs by developing a real-time Unix based PC System which was a multi-task, multi-user & fully networked system. Times were changing and during this same time period customers were beginning to address the issues of central storage, security and data management, which DOS system didn't adequately address. This was the beginning of LAN based systems.

Shop Floor Novell LAN

At about the same time a major aerospace customer asked us to port our factory automation software to a Novell LAN based system. This led to us that our the experiences with LANs and their particular requirements. Life since has not been the same for businesses in general and in particular, the manufacturing industry.

Unix, VMS and DOS

From 1985 until 1988 these systems evolved and matured into three basic product choices. Unix, VMS and DOS base Systems. Unix and VMS were the choice of large enterprises while DOS was preferred of small business.

Largest Shop Automation Contract from Pratt & Whitney

In the 80's CCI received a Shop Automation contract from Pratt & Whitney, which was one of the largest contracts for a factory automation system up to that time. Pratt chose CCI from all their competitors because of the ability of our systems to communicate with all of Pratt's existing manufacturing systems directly from machine tools to all of their manufacturing systems using CCI's Network Communication Servers. This Advanced Multi-Tasking System networked to the three separate Systems, IBM, Dec & HP applications their machine tool.

Microsoft Redefines Industry

Manufacturing was changing as Microsoft was redefining how industry was using

Microsoft Redefines Industry(cont)

computers to more efficiently operate their businesses. Microsoft realized that data storage, retrieval, security, ease of handling and multi-tasking was a necessary requirement if they were to survive and compete in the "PC" application market. This resulted in the first basic "multitasking" system, Windows 3.1.

Windows 3.1 didn't cut it for Manufacturing

Even though this was a great step toward an office based business, for Manufacturing this operating system was not a suitable choice. We decided not to develop our systems based on Windows 3.1 since this was not a preemptive operating system. In other words it was possible for an application to hog all of the resources of the computer and not allow another application access. Our thought was if you were shop-flooring and an application hogged the operating system you could run a part that you were cutting. As it turned out this was indeed the case and Windows 3.1 didn't cut it for manufacturing.

Windows 95 diminished demand for Unix and VMS Systems

With the release of Windows 95 the operating system was more "userproof" and we felt that it was time for us to start our conversion process. With the advent of Windows 95 the demand for Unix and VMS systems declined rapidly and with good reason. The Windows Operating System was being used in all facets of business and most companies just didn't want to have to maintain multiple operating systems. So Unix and VMS were no longer the choice for manufacturing.

First Database DNC System

In 1998 we finished development of our first Windows based System, the DNC2000 product, which was the foundation of our future offerings. Not following the crowd and releasing the long term needs of manufacturing we decided from the on start to build all our applications around a database for security, data integrity, data accessibility and providing a system that could meet the requirements of ISO9000 Quality Control Systems.

Product offerings have evolved

Since the creation of DNC2000, our product offerings have evolved into a suite of products that meet the needs of Domestic and International discrete manufacturers. Our current offerings address the needs of Document and Records management, Factory Communications including wireless, data access security, machine status collection and reporting, tool-path integration, special factory automation software development, etc.

International Enterprise System

ShopFloorManagerTM (pdf) or (html) is an International Manufacturing Software System that will continue to evolve as we add the features that are requested by our customers and meet the needs of International Discrete Manufacturers for Shop Floor Control and Quality Control.