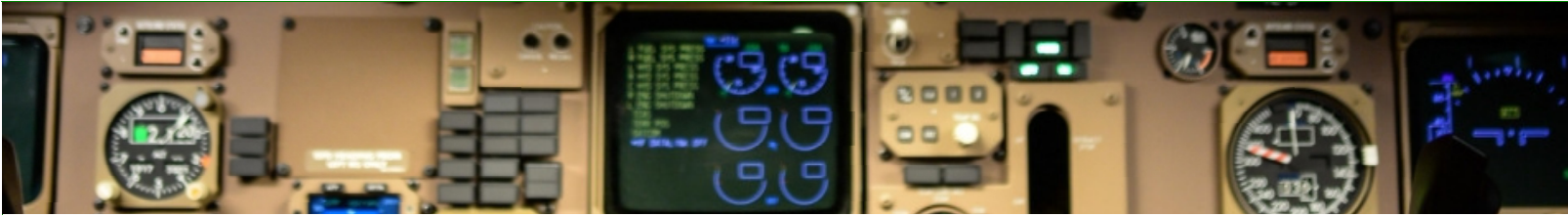


A Little History of CAD/CAM Integration, Inc.(CCI) [PDF-Version](#)



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's is located in Marblehead Massachusetts just north west of Boston, Mass. Until our recent move we were in Woburn for 29 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, Software Development & Machine Tool Controller design. These varied Educations & Experience have been instrumental in our product development leading to ShopFloorManager. This has been a 30 year Journey.

Born in July of 1983

CCI was born in July of 1983 using its four partner's diverse expertise to develop its mid-range multi-tasking, multi-user Unix Communications System. This system was first installed in defense contractor's facilities whose business required the ability to drip-feed very large files to manufacture airfoils for their customers. Starting with just three CNC's they have grown to over 50 CNC machine tools with Fanuc Controller, Mazak Controller, Haas Controller & Yasnac Controllers.

Ah 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-user, multi-tasking & 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 almost the same time a major aerospace customer asked us to port our factory automation software to a Novell LAN based system. This led to our first real life 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 1989 these systems evolved and matured into three basic product choices. Unix, VMS and DOS base Systems. Unix and VMS were the choice of larger enterprises while DOS was preferred of small factories.

Largest Shop Automation Software contract from Pratt & Whitney

In the 90'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 system using CCI's Network Communication Servers. This Advanced Multi-Tasking System networked to the three separate Systems, IBM, Dec & HP right at 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, user friendliness and multi-tasking was a necessary ingredient if they were to survive and dominate the "PC" application market. This resulted in the first quasi "multi-tasking" system, Windows 3.1.

Windows 3.1 didn't cut it for Manufacturing

Even though this was a great step forward for office based businesses, for Manufacturing this operating System was not a suitable choice. We decided not 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 drip-feeding and an application hogged the operating system you could ruin 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 "preemptive" 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 1996 we finished developed of our first Windows based System, the DNCWin product, which was the foundations 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 for providing a system that could meet the requirements of ISO9000 Quality Control Systems.

Product offerings have evolved

Since the creation of DNCWin™ our product offerings have evolved into to suite of products that meet the needs of Domestic and International discrete manufacturers. Our present offering address the needs of Document and Records management, Factory Communications including wireless, data access security, machine status collection and reporting, third-party integration, special factory automation software development, etc.

International Enterprise System

ShopFloorManager™(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 meets the needs of International Discrete Manufacturers for Shop Floor Control and Quality Control.