



## CASE STUDY

## Modernizing a Dental Practice Network Model for Greater Efficiency and Patient Service

Before the engagement, this dental practice was losing time and money due to inefficient technology structure and processes.

### Background

A Chicago-area dental practice servicing 800 patients hired MXOtech to upgrade from a peer-to-peer network to a fully functional and more efficient office network utilizing Microsoft's domain Active Directory network model.

The dental practice was also moving to a digital imaging system to enable patients to better participate in their dental care, requiring MXOtech's help to facilitate the move to this system.

In addition, the dental staff needed better communication tools within and outside the office.

### Approach

MXOtech performed on-site interviews and surveys to get an understanding of current needs and the existing network configuration. The new network architecture was designed and then included with MXOtech's final proposal.

MXOtech installed a system to support the practice's dental imaging, which is now 100% electronic and allows for instant viewing of the patients' X-rays. It was recommended that two LCD screens be installed to display the digital dental images in each operator office. One 20-inch LCD screen displays data for the doctor, while a larger 23-inch screen, mounted on ergonomic brackets, displays images to the patient.

This new system not only improves the doctor/patient relationship, it also eliminates the need for costly film processing.

MXOtech also configured the practice office to use the Microsoft Small Business Server so that they now host their own Exchange server and have remote access to their network. Their data is more secure and backed up regularly.

An in-depth analysis allowed MXOtech to pinpoint areas of improvement.





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Not only did these network solutions create efficiency, but they increased data security and access flexibility.

### Results

Greater efficiencies in patient dental imaging, allowing for quicker access to dental images, elimination of the use of film and developing, a better patient experience, and increased data security.

Staff users now have secure access to e-mail from home and are also able to connect remotely into the office. This gives users the flexibility to work from home.

Dentists and dental assistants use a dual monitor system in conjunction with a digital imaging system to instantly X-ray patients and store images on the server. Patients are then able to view their X-rays on the dual monitor.

### Technology Assessed

- The network is centered on the Microsoft Small Business server which provides e-mail hosting, Active Directory, file sharing, and print sharing services.
- Backups are run daily with an archive of two weeks. MXOtech recommends a three-tier backup system utilizing an onsite backup, Shadow Copy, and an offsite backup.
- Dual monitors were installed in all operatories with one large screen monitor for the patient mounted on an ergonomic wall bracket and the other easily viewable by the doctor.