



Background

GE Healthcare are a subsidiary of General Electric and a leading supplier of medical imaging and patient monitoring equipment.

GE's nuclear medicine imaging systems were based on old technology with products that had been successful but were now expensive to manufacture and provided an old fashioned user interface. Servicing of the installed base was expensive due to component obsolescence and system complexity.

Solution

Tactiq developed a nuclear medicine imaging system platform based on modern technology with a ground breaking user interface design which supported clinical usage and workflow more effectively than existing products. The system was extremely successful based on its ease of use and reliability.

The platform approach allowed a wide range of products to be rapidly developed using the same electronics platform and software, maximising the return on investment.

Service tools and automated calibration and test reduced service costs and the flexible platform approach allowed the electronics and software to be sold as an upgrade to existing products based on the previous technology. This was a double win by creating a completely new upgrade market and reducing service and support costs.

Tactiq had software development and electronics design responsibility for this leading edge body scanner and continue to provide support. Tactiq lead the international development team and pioneered the system design, image acquisition and user interface design. Tactiq provided full system development including software and hardware architecture for both image acquisition to platform electronics and motion control.

The ability to support multiple configurations, provide DICOM compliance with a ground breaking user interface produced GE Healthcare's most successful nuclear medicine scanner. Although nearing end of life, this has a substantial installed base.

Main Challenges

- Full system development
- Software and hardware architecture
- Image acquisition and processing
- Motion control
- Real-time software (C, C++ & assembler)
- Platform electronics
- Full User Interface development
- DICOM networking
- Global project management

