

### Wireless Infrastructure Company Makes Waves by Increasing Productivity with RF-vu

*"RF-vu allows me to quickly change the way I configure a design, to see if there's a more cost-effective way to build it out. It's just an outstanding tool that has helped us double our productivity and reduce the overall costs of our installations."*

- Kely Davis

Director of Business Development, Wireless Division  
Communication Technology Services (CTS)



#### Facts-at-a-glance

**Client:** CTS

**Headquarters:** Marlborough, MA U.S.A.

**Founded:** 1990

**Services offered:** Nationwide, turn-key integrator of wireless communications solutions

**End-clients:** All the major US wireless operators, system integrators, and equipment manufacturers, enterprise/end-users

#### Benefits

##### RF-vu helped CTS to:

- ✓ Double productivity for the entire team in the creation of in-building wireless infrastructure designs
- ✓ Decrease the overall costs of their installations
- ✓ Increase the productivity of the company with more accurate designs
- ✓ Reduce training and travel costs



Sometimes being too good at something can cause you more headaches than you expect. That's what CTS discovered as they won more and more contracts to design and install wireless infrastructures within buildings for their customers. They desperately needed a tool that would help them better manage the huge amounts of data they were using in their designs, and, most importantly, keep accurate.

"One small mistake early on in the project can turn into real problems at the end," explains Kely Davis, design engineer and Director of Business Development for the Wireless Division at CTS. "One-eighth of an inch on my scaled drawing can translate into 15 feet of cable too much or too little at installation — there's exponential potential for issues."

#### Highly qualified engineers spending valuable time on clerical tasks

Initially, CTS was using mostly manual methods to create their designs. Design engineers used Microsoft® Visio to show the types of equipment and its placement within a building on a scaled drawing of the structure. They then used a spreadsheet application to create link budgets — a list of calculations of the predicted signal strength across the site based on equipment used, structural influences, and other factors.

"The link budget is a very technical calculation that is easy to make mistakes on," says Kely. "There are so many points of failure when entering, tracking, and amending this data."

To ensure accuracy in their designs, the engineers were laboring over their calculations. "The design engineers felt like data entry clerks — they were spending so much time just managing spreadsheets," says Kely.

#### CTS doubles productivity with integrated tool

CTS decided it was high time they found a way to get better value from their investment in their design engineers. They implemented iBwave's RF-vu, a complete software tool that fully automates the design, planning, and management of indoor wireless networks and predicts their performance. It provides RF engineers with the right mix of usability, control, and flexibility to simulate real project situations and accurately predict the network quality of service.

"We considered Wireless Valley, but the license fees were cost prohibitive," says Kely. "I used RF-vu when I was working at another project, and I was blown away by what it could do."

